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Oxidant-Precursor Relationships Under Pollutant Transport Conditions. Outdoor Smog Chamber Study. Volume II. Appendixes

Research Triangle Inst., Research Triangle Park, NC

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EPA

Oxidant-Precursor Relationships Under Pollutant Transport Conditions

Outdoor Smog Chamber Study Volume 2. Appendixes

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16. ABSTRACT

Multiple-day experiments were conducted in outdoor smog chambers to investigate the influence of simulated transport on ozone generation by various combinations of a surrogate urban hydrocarbon mixture and nitrogen oxides. The simulation of transport was accomplished by progressively diluting the contents of the chambers with purified air.

First day ozone maximum concentrations were reduced under dilution conditions and were sensitive to both dilution rate and time at which dilution was initiated. Second and third-day ozone maxima were reduced at increasing dilution rates, but the reduction was less than proportional to the extent of dilution. The ozone-generative potential of an aged photochemical system generally exceeded 0.08 ppm.

Additional experiments were conducted to examine the ozone-generative potential of low reactivity hydrocarbons, to provide data for testing and validation of a computer-based photochemical simulation model, and to compare the behavior of two types of outdoor smog chambers.

Volume 1 contains all textual material. Volume 2 contains all the smog chamber analytical data for hydrocarbons, NO_x, O_3, CO, CH_2O, and condensation nuclei, as well as dilution and meterological data.

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OXIDANT-PRECURSOR RELATIONSHIPS UNDER POLLUTANT TRANSPORT CONDITIONS

Outdoor Smog Chamber Study

Volume 2. Appendixes

by

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ABSTRACT

A total of 146 multiple-day experiments was conducted in the four outdoor smog chambers that comprise the RTI smog chamber facility. These experiments were conducted to investigate the influence of simulated transport on ozone generation by various combinations of a surrogate urban hydrocarbon mixture and nitrogen oxides. The simulation of transport was accomplished by progressively diluting the contents of the chambers with purified air.

Maximum first-day ozone concentrations were reduced under dilution conditions. First-day ozone maxima were found to be sensitive both to the dilution rate and the time in the experiment that dilution was initiated. Second and third-day ozone maxima were reduced by increasing dilution rates but the reduction was less than proportional to the extent of dilution. Second and third-day ozone maxima were reduced by dilution but the ozone-generative potential, as measured by net ozone concentrations, was not. The ozone-generative potential of an aged photochemical system contained in the RTI smog chambers generally exceeded 0.08 ppm.

Additional experiments were conducted to examine the ozone-generative potential of low reactivity hydrocarbons, to provide data for testing and validation of a computer-based photochemical simulation model, and to compare the behavior of two types of outdoor smog chambers.

Volume 1 contains all textual material. Volume 2 (Appendixes) contains individual hydrocarbon analyses from each experiment as well as concentration (O_3, oxidant, nitrogen oxides, THC, CH_4, NMHC, HCHO, CN, and Freon-12) and environmental (solar radiation and temperature) data from each experiment.

This report was submitted in fulfillment of Contract No. 68-02-2207 by the Research Triangle Institute under the sponsorship of the U.S. Environmental Protection Agency. This report covers the period June 6, 1975 to June 23, 1978.

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DATA SHEETS OF INDIVIDUAL HYDROCARBON CONCENTRATIONS

Note that data sheets are listed in chronological order; see Tables 2 and 3 in Volume 1 for a summary of the experimental program.

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	7-22-75	15.27	116.8	2.6	369.0	9.2	696.0		1.4	
1	7-23-75	4.60	3.9	0.0	23.0	3.0	37.3		0.0	
1	7-23-75	16.10	3.7	0.0	21.4	1.9	35.5		0.0	
1	7-24-75	4.55	2.1	0.4	18.8	1.6	30.2		0.0	
1	7-24-75	15.77	1.1	0.1	11.4	1.5	10.4		0.0	
2	7-22-75	15.52	26.3	0.3	72.9	1.2	342.8		0.0	
2	7-23-75	4.73	2.3	0.0	9.0	0.2	9.5		0.0	
2	7-23-75	16.27	1.9	0.0	4.9	0.6	9.8		0.0	
2	7-24-75	4.68	1.6	0.0	3.1	0.5	8.6		0.0	
2	7-24-75	15.93	0.9	0.0	1.4	0.4	3.0		0.0	
3	7-23-75	4.88	2.1	0.0	6.5	0.2	7.9		0.1	
3	7-23-75	16.52	2.6	0.0	5.6	0.7	9.8		0.0	
3	7-24-75	4.83	3.1	0.6	3.3	1.3	14.9		0.6	
3	7-24-75	16.18	4.5	0.5	3.4	0.7	2.9		0.0	
4	7-22-75	15.83	5.6	0.1	16.5	0.2	38.3		0.0	
4	7-23-75	4.98	1.8	0.0	2.5	0.0	5.7		0.0	
4	7-23-75	15.00	3.4	0.0	1.3	0.4	2.6		0.0	
4	7-24-75	4.95	1.3	0.1	0.2	0.4	2.5		0.0	
4	7-24-75	16.43	2.1	0.2	0.8	0.6	1.1		0.1	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	7-22-75	15.27		331.5	8.3	
1	7-23-75	4.60		14.7	0.0	
1	7-23-75	16.10		16.8	0.3	
1	7-24-75	4.55		11.7	0.0	
1	7-24-75	15.77		3.5	0.4	
2	7-22-75	15.52		227.5	6.0	
2	7-23-75	4.73		4.7	0.0	
2	7-23-75	16.27		4.9	0.0	
2	7-24-75	4.68		3.5	0.0	
2	7-24-75	15.93		5.4	0.0	
3	7-23-75	4.88		4.3	0.0	
3	7-23-75	16.52		3.3	0.0	
3	7-24-75	4.83		8.8	0.0	
3	7-24-75	16.18		7.4	0.0	
4	7-22-75	15.83		17.3	0.0	
4	7-23-75	4.98		3.1	0.0	
4	7-23-75	15.00		1.3	0.0	
4	7-24-75	4.95		2.5	0.0	
4	7-24-75	16.43		0.2	0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	7-28-75	4.02	660.0	1184.0	660.0	309.0	2344.0		152.4	
1	7-28-75	16.02	37.2	143.2	275.1	15.4	616.0		0.0	
1	7-29-75	4.63	1.8	7.7	9.6	0.3	16.7		0.0	
1	7-30-75	4.60	1.8	6.6	9.0	0.4	11.4		0.0	
2	7-28-75	4.28	270.0	130.8	188.1	420.0	1348.0		58.8	
2	7-28-75	16.18	4.2	0.4	9.6	0.0	20.9		0.0	
2	7-29-75	4.75	2.2	0.0	4.4	0.4	10.6		0.0	
2	7-30-75	4.73	1.4	0.0	1.6	0.4	4.7		0.0	
3	7-28-75	4.45	384.0	596.0	384.0	117.3	1240.0		100.0	
3	7-28-75	16.52	4.6	0.0	15.8	0.3	48.4		0.0	
3	7-29-75	4.90	2.1	0.0	3.8	0.5	7.3		0.0	
3	7-30-75	4.87	5.4	0.7	3.5	0.6	4.7		0.0	
4	7-28-75	4.60	98.5	10.3	82.4	40.5	278.6		19.9	
4	7-28-75	16.52	5.5	0.3	15.2	0.6	39.2		0.3	
4	7-29-75	5.05	1.0	0.0	0.7	0.2	3.7		0.0	
4	7-30-75	5.03	3.1	0.2	1.1	0.4	1.3		0.0	

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RTI PROJECT NO. 430-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	7-28-75	4.02		1965.0	79.0	
1	7-28-75	16.02		331.5	8.1	
1	7-29-75	4.63		6.7	0.0	
1	7-30-75	4.60		4.3	0.0	
2	7-28-75	4.28		1025.0	26.7	
2	7-28-75	16.18		12.6	0.0	
2	7-29-75	4.75		2.4	0.0	
2	7-30-75	4.73		1.3	0.0	
3	7-28-75	4.45		935.0	37.0	
3	7-28-75	16.52		21.3	0.0	
3	7-29-75	4.90		3.6	0.0	
3	7-30-75	4.87		3.3	0.0	
4	7-28-75	4.60		211.9	7.1	
4	7-28-75	16.52		22.4	0.4	
4	7-29-75	5.05		1.5	0.0	
4	7-30-75	5.03		0.9	0.0	

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PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	***********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8- 4-75	4.98	8.8	13.3	12.8	5.6	59.6		46.0	
1	8- 4-75	17.02	1.1	4.1	2.6	0.0	6.6		0.0	
1	8- 5-75	4.62	0.6	4.6	4.8	0.0	4.8		0.0	
1	8- 5-75	15.02	0.0	2.0	1.0	0.0	0.9		0.0	
2	8- 4-75	4.70	7.8	10.2	12.6	6.1	41.2		3.0	
2	8- 4-75	17.18	0.6	0.8	0.7	0.0	2.3		0.0	
2	8- 5-75	4.77	0.4	0.0	0.0	0.0	1.8		0.0	
2	8- 5-75	15.18	0.3	0.4	0.4	0.2	0.6		0.0	
3	8- 4-75	17.35	1.9	16.1	8.5	0.0	17.9		0.0	
3	8- 5-75	4.90	0.4	3.3	1.8	0.1	3.0		0.0	
4	8- 4-75	4.98	1.6	3.7	3.0	1.3	12.4		0.0	
4	8- 4-75	17.52	0.3	4.2	1.8	0.0	3.1		0.0	
4	8- 5-75	5.05	0.5	0.4	0.6	0.3	1.6		0.2	
4	8- 5-75	15.52	0.0	0.7	0.0	0.0	0.0		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8- 4-75	4.98		31.0	0.0	770.0
1	8- 4-75	17.02		3.3	0.0	183.4
1	8- 5-75	4.62		1.3	0.0	144.2
1	8- 5-75	15.02		0.0	0.0	21.1
2	8- 4-75	4.70		31.4	0.0	1000.0
2	8- 4-75	17.18		3.8	0.0	124.6
2	8- 5-75	4.77		0.0	0.0	67.9
2	8- 5-75	15.18		0.0	0.0	8.9
3	8- 4-75	17.35		6.6	0.0	156.8
3	8- 5-75	4.90		1.7	0.0	1.3
4	8- 4-75	4.98		12.3	0.0	295.4
4	8- 4-75	17.52		0.3	0.0	50.8
4	8- 5-75	5.05		1.7	0.0	0.0
4	8- 5-75	15.52		0.0	0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8- 8-75	4.60	582.7	744.0	542.7	193.9	1637.5		116.3	
1	8- 8-75	16.52	57.4	312.0	291.0	9.5	610.0		1.1	
1	8- 9-75	4.58	15.1	95.0	94.5	2.2	186.0		0.0	
1	8- 9-75	14.67	6.8	49.7	44.4	1.5	50.4		0.0	
1	8-10-75	4.58	5.5	30.4	34.5	1.0	32.9		0.0	
2	8- 8-75	4.77	288.1	452.0	294.9	104.6	830.7		47.8	
2	8- 8-75	16.68	26.6	168.2	122.7	3.2	255.2		0.2	
2	8- 9-75	4.72	10.9	0.8	42.3	1.3	86.4			
2	8- 9-75	14.85	1.7	12.6	12.1	1.0	15.3		0.0	
2	8-10-75	4.72	2.5	13.3	10.6	0.4	13.0		0.0	
3	8- 8-75	4.87	249.7	315.7	249.5	92.7	731.6		38.9	
3	8- 8-75	16.80	36.4	115.2	98.7	1.9	230.4		0.4	
3	8- 9-75	4.87	11.6	44.2	42.0	1.8	87.6		0.0	
3	8- 9-75	14.93	3.6	10.7	11.2	1.1	14.0		0.0	
3	8-10-75	4.85	6.4	13.9	17.0	1.0	14.7		0.0	
4	8- 8-75	5.00	61.7	39.8	54.2	20.2	149.3		10.2	
4	8- 8-75	16.85	10.1	18.5	26.3	1.5	54.0		0.0	
4	8- 9-75	5.03	4.5	6.1	8.0	0.4	22.6		0.0	
4	8- 9-75	15.10	5.4	1.2	4.5	1.4	7.8		0.9	
4	8-10-75	5.00	3.1	1.9	2.8	0.4	5.4		0.0	

RESEARCH TRIANGLE INSTITUTE
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PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8- 8-75	4.60		1152.4	27.3	2021.5
1	8- 8-75	16.52		324.0	7.3	625.1
1	8- 9-75	4.58		95.5	2.1	200.0
1	8- 9-75	14.67		21.2	0.4	60.0
1	8-10-75	4.58		17.3	0.0	58.4
2	8- 8-75	4.77		535.2	14.4	1308.3
2	8- 8-75	16.68		134.5	3.2	390.6
2	8- 9-75	4.72		46.1	1.1	200.2
2	8- 9-75	14.85		9.8	0.0	41.9
2	8-10-75	4.72		6.6	0.0	22.4
3	8- 8-75	4.87		458.4	12.3	1050.2
3	8- 8-75	16.80		129.0	4.2	196.7
3	8- 9-75	4.87		46.6	1.0	108.5
3	8- 9-75	14.93		7.4	0.0	36.3
3	8-10-75	4.85		7.3	0.0	25.6
4	8- 8-75	5.00		82.3	0.9	261.1
4	8- 8-75	16.85		29.1	0.0	149.8
4	8- 9-75	5.03		12.7	0.0	73.5
4	8- 9-75	15.10		8.5	0.0	42.0
4	8-10-75	5.00		4.0	0.0	45.2

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	********** C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8-12-75	4.60	552.1	415.1	449.9	180.7	946.5		112.8	
1	8-12-75	15.52	83.6	336.0	360.0	0.0	848.0		0.0	
2	8-12-75	4.75	302.8	203.9	246.5	92.6	538.5		61.7	
2	8-12-75	15.68	74.6	169.8	217.5	3.1	384.8		0.0	
3	8-12-75	4.90	264.1	172.3	201.6	81.0	496.8		54.1	
3	8-12-75	15.82	47.2	99.4	126.0	2.3	247.6		0.0	
4	8-12-75	5.03	65.5	42.8	56.8	24.0	110.9		13.2	
4	8-12-75	16.98	24.4	47.0	61.2	1.1	110.8		0.0	
4	8-13-75	5.02	24.8	47.4	62.8	2.8	134.0		0.0	
4	8-13-75	15.43	17.6	35.9	50.7	3.2	94.0		0.0	
4	8-14-75	5.03	8.7	27.6	41.2	1.8	83.8		0.0	
4	8-14-75	15.85	10.6	27.9	28.5	1.0	61.7		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8-12-75	4.60		1115.2	33.8	2086.5
1	8-12-75	15.52		865.0	24.9	959.0
2	8-12-75	4.75		503.8	15.5	462.0
2	8-12-75	15.68		325.0	8.8	
3	8-12-75	4.90		510.1	16.6	851.1
3	8-12-75	15.82		300.0	10.8	497.7
4	8-12-75	5.03		124.4	3.6	276.7
4	8-12-75	16.98		92.0	2.3	
4	8-13-75	5.02		92.1	2.3	106.7
4	8-13-75	15.43		56.3	0.0	75.9
4	8-14-75	5.03		50.6	0.0	
4	8-14-75	15.85		33.9	0.0	53.9

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8-17-75	2.10	9.7	2.1	0.6	0.0	1.6		0.0	
1	8-17-75	4.98	753.3	615.3	730.5	361.4	2040.1		299.5	
1	8-17-75	15.02	96.2	426.0	598.7	0.0	1280.0		0.0	
1	8-18-75	5.12	24.4	158.7	224.5	0.0	450.7		0.0	
1	8-18-75	15.55	8.2	56.6	70.8	0.0	99.8		0.0	
1	8-19-75	5.07	6.1	52.0	72.3	0.0	86.8		0.0	
1	8-19-75	15.02	14.1	41.7	47.6	0.0	46.5		0.0	
2	8-17-75	2.27	7.3	21.4	0.0	0.0	0.9		0.0	
2	8-17-75	5.10	432.8	316.2	368.9	180.1	1028.9		149.9	
2	8-17-75	15.15	91.8	268.0	351.0	0.0	796.0		0.0	
2	8-18-75	5.27	18.8	81.5	116.3	0.0	260.0		0.0	
2	8-18-75	15.65	7.1	24.0	30.1	0.0	51.3		0.0	
2	8-19-75	5.20	6.6	23.7	28.3	0.0	49.0		0.0	
2	8-19-75	15.15	21.7	18.3	20.4	0.0	28.1		0.0	
3	8-17-75	2.43	6.9	1.4	0.5	2.0	0.0		0.0	
3	8-17-75	5.23	430.7	327.9	364.3	176.0	1021.2		142.3	
3	8-17-75	15.27	75.7	234.8	287.9	9.5	640.7		0.0	
3	8-18-75	5.42	22.1	63.5	80.2	3.4	173.0		0.0	
3	8-18-75	15.80	7.6	17.5	16.3	1.9	28.4		0.0	
3	8-19-75	5.35	28.1	19.9	26.3	1.6	29.1		0.0	
3	8-19-75	15.27	15.4	16.8	16.2	1.6	20.9		0.0	
4	8-17-75	2.57	17.1	2.4	0.8	0.0	2.1		0.0	
4	8-17-75	5.37	96.3	64.7	86.4	46.1	218.4		33.3	
4	8-17-75	15.43	39.0	40.8	55.9	2.6	121.1		0.0	
4	8-18-75	5.55	25.9	16.9	44.8	0.0	74.7		0.0	
4	8-18-75	15.88	10.9	4.7	16.3	0.0	38.7		4.2	
4	8-19-75	5.50	41.8	8.9	21.6	0.0	28.0		0.0	
4	8-19-75	15.43	23.8	5.4	13.6	0.0	20.6		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8-17-75	2.10	7.8	0.0	0.0	
1	8-17-75	4.98		1846.6	73.3	1041.1
1	8-17-75	15.02		895.0	33.1	518.0
1	8-18-75	5.12		298.8	10.1	312.0
1	8-18-75	15.55		41.4	0.0	96.3
1	8-19-75	5.07		38.3	0.0	68.5
1	8-19-75	15.02		18.1	0.0	62.8
2	8-17-75	2.27	0.0	0.0	0.0	46.8
2	8-17-75	5.10		957.5	37.7	1305.7
2	8-17-75	15.15		565.0	20.4	735.0
2	8-18-75	5.27		176.4	13.5	212.5
2	8-18-75	15.65		23.3	0.0	61.5
2	8-19-75	5.20		21.9	0.0	42.8
2	8-19-75	15.15		11.0	0.0	55.0
3	8-17-75	2.43	4.4	0.0	0.0	76.2
3	8-17-75	5.23		906.7	42.9	1416.3
3	8-17-75	15.27		451.7	21.4	710.3
3	8-18-75	5.42		115.4	3.9	173.3
3	8-18-75	15.80		14.6	0.0	98.1
3	8-19-75	5.35		15.4	0.0	27.6
3	8-19-75	15.27		17.3	0.0	27.1
4	8-17-75	2.57	7.0	1.6	0.0	0.0
4	8-17-75	5.37		207.2	6.9	235.4
4	8-17-75	15.43		83.4	0.0	63.5
4	8-18-75	5.55		39.0	0.0	45.5
4	8-18-75	15.88		21.7	0.0	45.7
4	8-19-75	5.50		12.9	0.0	17.5
4	8-19-75	15.43		9.0	0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8-21-75	4.80	789.2	654.0	750.0	369.0	2069.0		312.0	
1	8-21-75	15.52	116.6	408.6	542.3	0.0	1109.5		0.0	
1	8-22-75	4.77	40.8	260.0	363.0	0.0	752.0		0.0	
1	8-22-75	15.15	15.6	207.5	280.5	0.0	498.6		0.0	
1	8-23-75	4.83	15.5	195.5	259.9	0.0	464.9		0.0	
1	8-23-75	15.52	8.2	157.2	197.9	0.0	293.8		0.0	
2	8-21-75	5.00	406.0	320.0	405.0	215.1	1100.0		208.0	
2	8-21-75	15.13	68.1	172.9	260.0	0.0	528.5		0.0	
2	8-22-75	4.93	23.9	85.8	122.1	0.0	340.8		0.0	
2	8-22-75	15.27	15.0	118.5	137.4	0.0	289.9		0.0	
2	8-23-75	5.02	11.8	99.1	125.6	0.0	253.6		0.0	
2	8-23-75	15.65	10.0	106.9	123.9	0.0	215.6		0.0	
3	8-21-75	5.17	348.0	284.0	348.0	188.7	932.0		144.4	
3	8-21-75	15.60	86.3	184.6	223.2	4.9	529.5		0.0	
3	8-22-75	5.12	25.0	89.8	123.3	3.2	284.4		0.0	
3	8-22-75	15.35	16.8	93.0	122.4	5.0	225.7		0.0	
3	8-23-75	5.20	15.1	76.3	100.0	3.3	182.5		0.0	
3	8-23-75	15.80	10.5	72.6	83.4	3.2	126.2		0.0	
4	8-21-75	5.33	93.0	64.1	83.1	40.8	218.3		32.6	
4	8-21-75	15.78	21.3	35.8	51.7	1.3	111.8		0.0	
4	8-22-75	5.30	16.0	27.4	43.0	0.0	89.6		0.0	
4	8-22-75	15.48	10.7	20.8	28.6	0.0			0.0	
4	8-23-75	5.37	15.1	21.2	26.9	0.0	54.3		0.0	
4	8-23-75	15.85	23.9	16.4	26.8	0.0	34.7		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	8-21-75	4.80		1955.0	76.5	1700.0
1	8-21-75	15.52		795.7	28.9	788.6
1	8-22-75	4.77		540.0	19.1	568.4
1	8-22-75	15.15		300.6	9.7	223.6
1	8-23-75	4.83		278.9	8.4	212.7
1	8-23-75	15.52		144.6	0.0	184.9
2	8-21-75	5.00		1050.0	44.9	593.9
2	8-21-75	15.13		386.6	13.5	365.7
2	8-22-75	4.93		253.5	18.3	263.0
2	8-22-75	15.27		184.0	6.3	139.8
2	8-23-75	5.02		153.3	6.6	119.1
2	8-23-75	15.65		112.4	0.0	67.3
3	8-21-75	5.17		875.0	38.5	1300.1
3	8-21-75	15.60		387.0	14.3	492.8
3	8-22-75	5.12		204.0	8.4	433.3
3	8-22-75	15.35		133.0	3.1	174.8
3	8-23-75	5.20		106.9	0.0	163.7
3	8-23-75	15.80		62.9	0.0	
4	8-21-75	5.33		206.1	7.3	230.7
4	8-21-75	15.78		80.3	2.5	105.4
4	8-22-75	5.30		62.0	0.0	92.0
4	8-22-75	15.48		32.8	0.0	76.0
4	8-23-75	5.37		34.8	0.0	71.8
4	8-23-75	15.85		15.8	0.0	70.9

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8-27-75	2.03	5.2	5.4	0.0	1.5	0.0	0.0	0.0	
1	8-27-75	4.85	804.8	671.9	743.7	375.3	2106.3		330.6	
1	8-27-75	15.18	100.0	508.0	654.0	0.0	1484.0		0.0	
1	8-28-75	4.83	59.0	436.0	654.0	0.0	1408.0		0.0	
1	8-28-75	15.55	28.9	395.8	489.8	0.0	1048.2		0.0	
1	8-29-75	5.05	21.9	328.5	446.5	0.0	894.8		0.0	
1	8-29-75	15.47	16.2	312.8	396.0	0.0	775.1		0.9	
2	8-27-75	2.22	5.4	4.5	0.6	0.8	0.0	0.0	0.0	
2	8-27-75	5.02	394.6	307.6	556.9	186.7	989.2		146.4	
2	8-27-75	15.27	100.8	216.0	333.0	0.0	688.0		0.0	
2	8-28-75	5.00	37.4	126.2	200.7	0.0	412.0		0.0	
2	8-28-75	15.60	17.3	102.0	145.2	0.0	286.3		0.0	
2	8-29-75	5.23	14.3	109.4	156.2	0.0	296.4		0.0	
2	8-29-75	15.52	16.6	84.6	125.2	0.0	179.3		0.0	
3	8-27-75	2.35	5.1	5.5	0.8	0.9	1.4	0.0	0.0	
3	8-27-75	5.22	388.9	309.6	309.3	154.6	900.0		126.5	
3	8-27-75	15.35	141.6	236.0	289.2	17.4	668.0		0.0	
3	8-28-75	5.08	65.0	195.0	277.2	0.0	596.0		0.0	
3	8-28-75	15.65	26.9	171.0	222.6	0.0	454.7		0.0	
3	8-29-75	5.42	23.4	148.8	219.2	0.0	437.9		0.0	
3	8-29-75	15.63	14.0	121.7	168.1	0.0	296.6		0.0	
4	8-27-75	2.48	30.2	10.1	7.4	4.2	11.2	3.6	0.0	
4	8-27-75	4.85	109.0	65.9	87.6	42.6	214.7		33.3	
4	8-27-75	15.48	35.2	42.6	64.2	4.2	126.0		0.0	
4	8-28-75	5.33	29.6	25.8	36.1	0.7	82.2		0.0	
4	8-28-75	15.68	22.9	21.8	30.2	0.0	57.6		0.0	
4	8-29-75	5.58	11.9	17.1	23.1	0.0	51.4		0.0	
4	8-29-75	15.65	9.9	12.8	15.6	0.0	29.8		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8-27-75	2.03	1.8	0.0	0.0	0.0
1	8-27-75	4.85		2035.6	83.4	2076.2
1	8-27-75	15.18		1120.0	49.1	667.2
1	8-28-75	4.83		1035.0	42.6	196.7
1	8-28-75	15.55		689.1	30.7	237.7
1	8-29-75	5.05		576.6	17.8	304.6
1	8-29-75	15.47		124.3	8.0	173.0
2	8-27-75	2.22	2.4	0.0	0.0	21.2
2	8-27-75	5.02		907.8	33.8	1593.7
2	8-27-75	15.27		505.0	18.3	895.8
2	8-28-75	5.00		296.0	10.6	239.5
2	8-28-75	15.60		182.2	5.5	112.3
2	8-29-75	5.23		181.6	4.6	115.3
2	8-29-75	15.52		75.5	0.0	111.3
3	8-27-75	2.35	4.6	0.0	0.0	21.3
3	8-27-75	5.22		803.1	31.2	1080.5
3	8-27-75	15.35		481.0	17.1	600.7
3	8-28-75	5.08		436.5	15.4	120.4
3	8-28-75	15.65		298.9	9.4	114.9
3	8-29-75	5.42		279.8	8.5	91.7
3	8-29-75	15.63		175.2	0.0	66.6
4	8-27-75	2.48	5.7	7.6	0.0	0.0
4	8-27-75	4.85		210.7	7.3	327.8
4	8-27-75	15.48		86.0	0.0	134.2
4	8-28-75	5.33		58.1	0.0	64.8
4	8-28-75	15.68		38.3	0.0	35.9
4	8-29-75	5.58		34.2	0.0	24.9
4	8-29-75	15.65		20.4	0.0	23.5

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9-25-75	5.70	768.0	640.0	810.0	405.0	2164.0		340.8	
1	9-25-75	15.87	182.8	173.8	207.3	51.3	565.6		36.8	
1	9-26-75	5.22	27.0	25.2	35.7	7.1	70.4		2.3	
1	9-26-75	16.70	7.7	19.0	30.0	6.4	41.2		0.0	
1	9-27-75	5.18	8.2	17.8	25.9	2.2	43.4		0.0	
2	9-25-75	5.43	452.0	336.0	432.0	218.1	1184.0		177.2	
2	9-25-75	16.03	76.2	71.6	102.9	24.7	251.2		10.4	
2	9-26-75	5.43	14.1	10.8	12.7	2.0	39.1		1.1	
2	9-26-75	16.87	5.0	6.3	5.8	1.3	14.9		0.0	
2	9-27-75	5.43	6.9	6.5	7.9	0.8	14.2		0.0	
3	9-25-75	5.93	364.0	280.0	363.0	184.5	952.0		139.2	
3	9-25-75	16.20	62.4	55.4	71.1	18.6	152.8		4.1	
3	9-26-75	5.68	12.4	7.4	9.4	1.9	22.1		0.0	
3	9-26-75	17.03	11.6	6.9	8.6	3.5	29.1		3.2	
3	9-27-75	5.67	11.9	4.7	5.3	1.4	11.9		0.0	
3	9-27-75	15.37	13.3	10.0	5.3	2.2	8.2		0.0	
4	9-25-75	5.17	72.4	50.6	71.4	33.9	180.8		19.7	
4	9-25-75	16.37	16.5	15.5	16.2	5.4	50.0		1.0	
4	9-26-75	5.00	7.9	2.8	2.9	1.0	7.4		0.5	
4	9-26-75	17.20	7.0	2.9	1.7	1.1	4.2		0.0	
4	9-27-75	5.90	12.1	3.4	4.2	1.3	6.8		0.0	
4	9-27-75	15.53	18.2	11.0	7.3	10.2	11.0		0.0	

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			********** C5 COMPOUNDS **********			C7 COMPOUND
CHAMBER NUMBER	DATE	TIME (HRS. EST)	NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	TOLUENE
1	9-25-75	5.70		2030.0	83.0	1210.0
1	9-25-75	15.87		423.0	33.7	165.9
1	9-26-75	5.22		36.8	1.6	175.7
1	9-26-75	16.70		20.4	0.0	74.2
1	9-27-75	5.18		22.6	0.0	11.7
2	9-25-75	5.43		1105.0	43.8	545.0
2	9-25-75	16.03		188.0	7.6	61.1
2	9-26-75	5.43		30.3	1.0	50.3
2	9-26-75	16.87		7.4	0.0	6.4
2	9-27-75	5.43		8.4	0.0	16.2
3	9-25-75	5.93		895.0	34.6	677.6
3	9-25-75	16.20		89.5	3.4	116.9
3	9-26-75	5.68		14.7	0.0	43.7
3	9-26-75	17.03		13.5	0.0	40.8
3	9-27-75	5.67		8.3	0.0	17.3
3	9-27-75	15.37		6.0	0.0	5.8
4	9-25-75	5.17		139.5	6.6	252.0
4	9-25-75	16.37		39.7	2.1	54.1
4	9-26-75	5.00		5.1	0.0	22.3
4	9-26-75	17.20		4.1	0.0	7.4
4	9-27-75	5.90		7.4	0.0	10.0
4	9-27-75	15.53		12.9	0.0	12.6

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 430-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	***********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9-29-75	1.60	6.4	1.9	1.4	0.6	2.0		0.0	
1	9-29-75	5.13	1534.0	724.0	1377.0	708.0	4004.0		608.0	
1	9-29-75	16.28	171.6	152.8	375.0	20.3	940.0		3.2	
1	9-30-75	5.13	29.2	26.5	82.7	2.2	173.3		0.0	
1	9-30-75	17.03	13.9	17.6	56.1	3.4	92.8		0.0	
1	10- 1-75	15.20	13.0	15.7	55.3	6.3	67.0		0.0	
2	9-29-75	1.87	13.6	3.2	3.2	2.8	0.0		0.0	
2	9-29-75	5.32	504.0	320.0	432.0	228.9	1140.0		200.0	
2	9-29-75	16.45	46.6	55.6	104.1	19.2	220.0		1.8	
2	9-30-75	5.37	11.3	10.6	17.8	0.9	39.0		0.0	
2	9-30-75	17.37	10.8	7.0	9.4	1.6	17.6		0.0	
2	10- 1-75	15.28	6.0	5.3	6.2	1.7	10.3		0.0	
3	9-29-75	2.03	16.3	2.7	3.2	2.3	3.5		0.6	
3	9-29-75	5.60	542.3	267.4	503.2	261.6	1407.9		193.9	
3	9-29-75	16.53	68.2	26.2	102.9	19.2	248.0		1.6	
3	9-30-75	5.60	16.0	7.0	14.5	1.6	37.0		0.0	
3	9-30-75	17.33	7.3	3.8	6.7	0.6	8.5		0.0	
3	10- 1-75	15.37	7.7	3.2	4.3	1.9	9.7		0.0	
4	9-29-75	5.82	83.9	56.9	71.4	32.8	151.3		9.2	
4	9-29-75	16.70	17.8	11.8	16.9	1.6	38.6		0.7	
4	9-30-75	5.85	8.9	2.8	4.6	1.6	9.4		0.6	
4	9-30-75	17.53	6.5	1.8	1.9	1.4	6.4		0.0	
4	10- 1-75	15.45	11.9	1.6	3.4	4.0	15.9		0.6	

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER MILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	9-29-75	1.60		1.1	0.0	31.9
1	9-29-75	5.13		3765.0	143.5	2716.0
1	9-29-75	16.28		655.0	28.7	507.5
1	9-30-75	5.13		101.4	5.1	133.1
1	9-30-75	17.03		41.4	1.0	
1	10- 1-75	15.20		24.2	0.4	63.1
2	9-29-75	1.87		0.0	0.0	106.3
2	9-29-75	5.32		1060.0	47.2	606.2
2	9-29-75	16.45		151.0	22.1	248.5
2	9-30-75	5.37		26.7	0.0	30.7
2	9-30-75	17.37		9.7	0.0	
2	10- 1-75	15.28		4.9	0.0	45.7
3	9-29-75	2.03		3.3		16.7
3	9-29-75	5.60		1088.9	33.7	736.0
3	9-29-75	16.53		180.0	12.2	213.5
3	9-30-75	5.60		28.1	0.0	61.7
3	9-30-75	17.33		2.4	0.0	21.7
3	10- 1-75	15.37		6.4	0.0	23.9
4	9-29-75	5.82		158.0	3.5	144.7
4	9-29-75	16.70		29.7	1.1	46.8
4	9-30-75	5.85		9.6	0.3	41.3
4	9-30-75	17.53		3.8	0.0	35.8
4	10- 1-75	15.45		15.1	0.4	7.1

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10- 8-75	6.17	1572.0	832.0	1524.0	789.0	4288.0		640.0	
1	10- 8-75	16.05	454.0	348.0	702.0	41.1	1880.0		1.4	
1	10- 9-75	6.00	196.8	167.0	378.0	19.9	984.0		0.0	
1	10- 9-75	15.08	153.6	171.8	357.0	17.3	964.0		0.0	
1	10-10-75	4.55	137.2	170.2	387.0	0.0	924.0		0.0	
1	10-10-75	16.07	93.0	162.0	279.9	0.0	776.0		0.0	
2	10- 8-75	6.35	432.0	324.0	426.0	203.7	1052.0		121.6	
2	10- 8-75	16.20	197.2	208.0	236.4	18.0	664.0		2.3	
2	10- 9-75	6.17	95.4	118.8	177.0	15.9	412.0		0.0	
2	10- 9-75	15.33	68.0	107.2	150.3	9.6	347.6		0.0	
2	10-10-75	4.67	65.0	55.2	123.0	7.5	268.4		0.0	
3	10- 8-75	6.50	574.7	211.1	528.6	280.7	1455.4		2.7	
3	10- 8-75	16.30	270.6	148.7	275.8	47.1	821.6		3.1	
3	10- 9-75	6.33	91.6	56.2	101.7	12.0	284.8		0.9	
3	10- 9-75	15.58	63.2	38.6	78.3	2.3	206.0		1.2	
3	10-10-75	4.33	52.4	38.8	83.1	4.3	176.8		0.0	
3	10-10-75	16.40	24.2	34.0	69.6	5.6	142.6		0.0	
4	10- 8-75	6.65	87.0	54.7	72.5	38.2	170.1		0.0	
4	10- 8-75	16.57	76.0	62.4	89.1	21.5	198.8		0.0	
4	10- 9-75	7.43	80.2	42.2	59.1	5.2	128.8		0.0	
4	10- 9-75	15.83	28.8	24.8	32.7	3.9	81.2		0.0	
4	10-10-75	5.00	32.8	5.3	24.0	2.4	65.2		0.0	
4	10-10-75	16.57	33.2	22.0	25.7	1.4	47.6		0.0	

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	10- 8-75	6.17		4075.0	170.0	2709.0
1	10- 8-75	16.05		1415.0	58.5	714.0
1	10- 9-75	6.00		760.0	31.8	707.0
1	10- 9-75	15.08		720.0	25.6	691.6
1	10-10-75	4.55		720.0	33.9	417.9
1	10-10-75	16.07		560.0	24.9	382.2
2	10- 8-75	6.35		870.0	32.9	1225.0
2	10- 8-75	16.20		520.0	27.1	627.9
2	10- 9-75	6.17		318.0	12.6	158.9
2	10- 9-75	15.33		249.5	0.0	180.6
2	10-10-75	4.67		127.5	0.0	158.9
3	10- 8-75	6.50		1216.7	50.1	582.1
3	10- 8-75	16.30		639.4	28.4	359.2
3	10- 9-75	6.33		228.0	8.6	319.9
3	10- 9-75	15.58		137.5	8.2	217.7
3	10-10-75	4.33		130.0	7.9	168.0
3	10-10-75	16.40		96.0	5.0	100.1
4	10- 8-75	6.65		151.4	5.8	231.2
4	10- 8-75	16.57		156.0	7.8	240.7
4	10- 9-75	7.43		86.0	3.6	156.0
4	10- 9-75	15.83		60.0	1.6	124.6
4	10-10-75	5.00		51.5	0.0	79.1
4	10-10-75	16.57		25.9	0.0	65.1

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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10-14-75	5.12	1124.0	646.0	1044.0	546.0	2996.0		464.0	
1	10-14-75	16.08	180.8	238.0	771.0	0.0	1468.0		0.0	
1	10-15-75	4.53	44.2	48.2	420.0	0.0	532.0		0.0	
1	10-15-75	17.50	60.0	31.2	438.3	0.0	428.0		0.0	
1	10-16-75	4.23	48.0	27.2	396.0	0.0	416.0		0.0	
1	10-16-75	16.00	35.4	23.4	309.0	0.0	301.6		0.0	
2	10-14-75	5.48	366.0	262.0	293.7	150.6	856.0		116.0	
2	10-14-75	16.40	78.2	92.6	206.7	25.3	353.6		0.0	
2	10-15-75	17.87	40.2	11.3	54.3	4.2	132.4		0.0	
2	10-16-75	4.52	52.0	10.5	31.2	3.1	28.5		0.0	
2	10-16-75	16.33	26.8	7.7	37.2	1.7	87.6		0.0	
3	10-14-75	5.73	584.0	310.0	594.0	351.0	1644.0		296.4	
3	10-14-75	16.57	79.6	84.2	228.0	35.1	460.0		0.0	
3	10-15-75	18.08	69.4	17.2	75.9	14.6	165.6		2.4	
3	10-16-75	4.70	46.6	8.5	50.1	3.7	141.6		1.0	
3	10-16-75	16.58	22.4	4.2	28.7	2.0	80.0		0.0	
4	10-14-75	5.88	98.0	62.6	91.2	36.6	153.2		7.9	
4	10-14-75	16.73	30.4	14.8	43.8	5.7	56.0		0.0	
4	10-15-75	5.67	18.7	2.3	31.2	3.2	26.7		0.0	
4	10-15-75	18.33	73.8	9.3	70.2	11.9	107.6		1.3	
4	10-16-75	4.90	37.8	5.1	45.3	5.0	80.0		1.7	
4	10-16-75	16.83	47.2	3.5	37.8	2.5	77.2		0.0	

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RTI PROJECT NO. 43U-1154
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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	10-14-75	5.12		2815.0	121.5	2156.0
1	10-14-75	16.08		855.0	43.5	784.0
1	10-15-75	4.53		209.5	8.1	190.0
1	10-15-75	17.50		117.5	2.4	142.8
1	10-16-75	4.23		160.0	5.4	52.1
1	10-16-75	16.00		115.0	0.0	41.6
2	10-14-75	5.48		745.0	46.8	1001.0
2	10-14-75	16.40		233.0	15.0	528.5
2	10-15-75	17.87		91.5	4.1	130.9
2	10-16-75	4.52		12.7	0.0	108.5
2	10-16-75	16.33		52.5	0.0	50.3
3	10-14-75	5.73		1525.0	67.0	1547.0
3	10-14-75	16.57		288.5	12.3	262.5
3	10-15-75	18.08		92.5	1.3	69.9
3	10-16-75	4.70		100.5	6.1	77.0
3	10-16-75	16.58		46.6	0.0	53.5
4	10-14-75	5.88		91.0	5.6	194.6
4	10-14-75	16.73		32.0	0.0	56.4
4	10-15-75	5.67		6.4	0.0	40.9
4	10-15-75	18.33		66.0	0.0	281.4
4	10-16-75	4.90		55.0	0.0	103.6
4	10-16-75	16.83		48.3	0.0	39.8

RESEARCH TRIANGLE INSTITUTE
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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10-28-75	5.00	1104.9	617.6	971.2	454.9	2553.3		207.4	
1	10-28-75	18.07	178.2	188.4	600.0	16.5	1336.0		1.3	
1	10-29-75	4.43	50.2	44.0	247.4	8.4	440.5		0.0	
1	10-30-75	4.82	29.8	24.2	152.1	6.2	246.4		0.0	
1	10-30-75	16.82	34.4	25.0	170.1	0.0	151.6		0.0	
1	10-31-75	8.90	23.4	16.2	95.1	3.6	133.6		0.0	
2	10-28-75	5.18	414.3	309.4	384.3	183.7	1043.2		145.1	
2	10-28-75	18.23	67.4	74.4	172.2	8.6	298.4		0.0	
2	10-29-75	4.57	23.7	15.7	45.6	3.4	73.7		0.0	
2	10-30-75	4.97	20.4	11.8	29.7	1.4	39.4		0.0	
2	10-31-75	9.12	18.0	5.6	15.4	1.5	26.0		0.0	
3	10-28-75	5.60	610.6	311.0	559.7	293.8	1553.1		217.9	
3	10-28-75	18.40	93.8	68.6	154.8	9.4	364.4		2.2	
3	10-29-75	4.87	31.4	15.6	30.9	1.9	68.0		0.0	
3	10-29-75	5.13	20.4	7.9	13.4	2.6	33.3		0.0	
3	10-29-75	17.13	16.6	6.0	8.5	2.2	21.6		0.0	
3	10-31-75	9.53	18.5	5.7	8.6	2.3	17.2		0.0	
4	10-28-75	5.78	93.2	61.7	83.8	45.1	155.6		13.4	
4	10-28-75	18.57	28.0	14.4	57.3	1.6	145.6		0.0	
4	10-29-75	8.53	17.8	4.5	43.2	4.1	77.6		0.0	
4	10-30-75	5.27	17.8	2.9	36.7	1.8	71.6		0.0	
4	10-31-75	9.53	24.8	4.3	22.0	2.4	45.2		1.4	

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	10-28-75	5.00		1618.9	71.0	2088.5
1	10-28-75	18.07		795.0	38.0	623.0
1	10-29-75	4.43		198.9	7.9	228.9
1	10-30-75	4.82		96.0	4.6	26.7
1	10-30-75	16.82		29.9	1.6	45.4
1	10-31-75	8.90		46.6	1.1	39.9
2	10-28-75	5.18		939.8	41.0	1102.0
2	10-28-75	18.23		184.5	17.8	263.2
2	10-29-75	4.57		41.2	0.0	31.9
2	10-30-75	4.97		26.1	0.0	35.8
2	10-31-75	9.12		9.9	0.0	28.7
3	10-28-75	5.60		1413.8	91.0	1281.1
3	10-28-75	18.40		253.5	11.3	190.4
3	10-29-75	4.87		38.1	1.4	73.5
3	10-29-75	5.13		20.7	0.0	59.6
3	10-29-75	17.13		17.2	0.0	32.6
3	10-31-75	9.33		13.1	0.0	49.4
4	10-28-75	5.78		78.8	3.6	202.6
4	10-28-75	18.57		74.5	1.5	45.6
4	10-29-75	8.53		27.4	0.0	100.1
4	10-30-75	5.27		25.1	0.0	31.3
4	10-31-75	9.53		18.6	0.0	37.9

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 430-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	11- 4-75	6.20	1192.0	646.0	909.0	462.0	2824.0		412.0	
1	11- 4-75	16.57	324.0	446.0	762.0	28.5	1972.0		0.0	
1	11- 5-75	5.82	120.8	256.0	462.0	0.0	1016.0		0.0	
1	11- 5-75	16.50	59.4	232.0	402.0	0.0	1036.0		0.0	
1	11- 6-75	6.18	40.2	172.4	258.9	0.0	752.0		0.0	
1	11- 6-75	19.08	31.0	133.3	270.3	0.0	520.0		0.0	
2	11- 4-75	6.42	414.0	306.0	411.0	129.0	740.0		27.3	
2	11- 4-75	16.73	164.6	252.0	342.0	15.6	520.0		0.0	
2	11- 5-75	6.03	81.4	166.2	180.0	4.0	496.0		0.0	
2	11- 6-75	6.35	32.2	104.2	128.7	9.8	322.8		0.8	
2	11- 6-75	20.08	31.8	89.4	126.0	11.6	277.2		0.0	
3	11- 4-75	6.77	618.0	320.0	558.0	303.0	1596.0		255.2	
3	11- 4-75	17.07	216.0	212.0	402.0	23.0	1128.0		4.1	
3	11- 5-75	6.27	129.0	140.8	273.3	13.3	692.0		0.0	
3	11- 5-75	16.90	56.0	96.2	214.5	10.0	464.0		0.0	
3	11- 6-75	6.58	48.0	86.6	175.2	8.0	338.3		0.0	
3	11- 6-75	19.67	31.8	72.2	127.8	7.1	215.2		0.0	
4	11- 4-75	6.97	106.8	75.4	88.2	46.5	218.8		23.4	
4	11- 4-75	17.07	59.8	52.0	74.1	7.4	156.4		0.0	
4	11- 5-75	6.47	55.4	35.5	53.4	5.1	127.6		0.0	
4	11- 6-75	6.75	27.0	24.4	32.4	1.8	65.6		0.0	
4	11- 6-75	19.33	23.8	21.8	26.4	1.9	65.2		0.0	

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USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	11- 4-75	6.20		2640.0	98.0	1722.0
1	11- 4-75	16.57		1505.0	172.5	987.0
1	11- 5-75	5.82		695.0	30.2	938.0
1	11- 5-75	16.50		705.0	33.4	614.6
1	11- 6-75	6.18		520.0	24.4	442.4
1	11- 6-75	19.08		320.5	10.9	346.5
2	11- 4-75	6.42		263.0	16.6	1100.0
2	11- 4-75	16.73		219.0	9.4	868.0
2	11- 5-75	6.03		360.0	14.8	410.9
2	11- 6-75	6.35		226.0	7.4	187.6
2	11- 6-75	20.08		178.0	12.8	58.5
3	11- 4-75	6.77		1485.0	71.0	1134.0
3	11- 4-75	17.07		850.0	39.1	987.0
3	11- 5-75	6.27		510.0	19.9	541.8
3	11- 5-75	16.90		328.5	17.4	406.7
3	11- 6-75	6.58		185.5	7.4	324.1
3	11- 6-75	19.67		101.0	0.0	287.7
4	11- 4-75	6.97		160.0	7.3	140.7
4	11- 4-75	17.07		70.5	5.6	135.0
4	11- 5-75	6.47		93.3	2.4	128.1
4	11- 6-75	6.75		23.1	0.0	136.5
4	11- 6-75	19.33		48.1	0.0	108.5

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PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	11-18-75	1.27	103.6	7.1	10.6	3.4	8.8		0.0	
1	11-18-75	5.92	650.0	330.0	600.0	330.0	1716.0		270.8	
1	11-18-75	17.07	312.0	254.0	519.0	35.4	1312.0		4.1	
1	11-19-75	5.98	248.0	193.6	459.0	8.1	1188.0		1.2	
1	11-20-75	5.68	134.0	174.0	435.0	0.0	988.0		0.0	
1	11-20-75	16.27	102.2	137.2	336.0	0.0	832.0		0.0	
2	11-18-75	1.47	193.4	10.3	28.2	1.6	4.6		0.0	
2	11-18-75	6.08	552.0	310.0	507.0	276.6	1468.0		236.4	
2	11-18-75	17.23	144.8	124.6	258.6	18.7	584.0		4.0	
2	11-19-75	18.23	33.4	28.6	46.8	5.9	104.0		0.0	
2	11-20-75	5.95	28.0	19.0	33.0	2.1	91.2		0.0	
2	11-20-75	16.43	19.3	15.6	27.1	1.7	71.2		0.0	
3	11-18-75	1.63	32.2	1.7	2.6	1.9	2.1		0.0	
3	11-18-75	6.25	510.0	290.0	510.0	276.6	1400.0		231.6	
3	11-19-75	6.20	124.4	116.8	218.7	14.3	556.0		0.0	
3	11-19-75	18.40	84.6	108.2	219.0	18.4	536.0		0.0	
3	11-20-75	6.17	77.6	89.2	186.6	13.2	412.0		1.3	
3	11-20-75	16.60	50.0	71.0	131.7	7.1	333.2		0.0	
4	11-18-75	1.83	18.6	4.8	5.6	3.3	22.4		4.0	
4	11-18-75	6.42	418.0	308.0	411.0	240.0	1172.0		260.0	
4	11-18-75	17.57	230.0	202.0	405.0	42.3	1064.0		5.7	
4	11-19-75	6.43	25.0	13.4	75.6	4.1	87.6		0.0	
4	11-19-75	18.57	22.4	10.4	50.4	1.0	43.6		0.0	
4	11-20-75	6.42	28.0	14.0	64.5	9.4	53.2		0.0	
4	11-20-75	16.77	18.2	6.4	38.1	1.3	39.5		0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	11-18-75	1.27		8.0	0.0	10.1
1	11-18-75	5.92		1570.0	69.0	1127.0
1	11-18-75	17.07		935.0	41.7	847.0
1	11-19-75	5.98		905.0	38.0	840.0
1	11-20-75	5.68		745.0	28.7	660.1
1	11-20-75	16.27		630.0	23.9	555.8
2	11-18-75	1.47		11.9	0.0	17.1
2	11-18-75	6.08		1385.0	60.5	1232.0
2	11-18-75	17.23		441.0	18.5	477.4
2	11-19-75	18.23		73.5	2.5	144.2
2	11-20-75	5.95		60.0	2.9	134.4
2	11-20-75	16.43		49.5	0.0	36.4
3	11-18-75	1.63		0.0	0.0	9.1
3	11-18-75	6.25		1340.0	57.0	882.0
3	11-19-75	6.20		401.5	14.1	690.0
3	11-19-75	18.40		391.5	20.2	676.9
3	11-20-75	6.17		178.5	10.0	410.0
3	11-20-75	16.60		235.5	8.0	336.(
4	11-18-75	1.83		33.7	0.0	60.8
4	11-18-75	6.42		1210.0	271.0	1127.0
4	11-18-75	17.57		790.0	32.4	889.0
4	11-19-75	6.43		36.6		296.1
4	11-19-75	18.57		12.7	5.9	190.0
4	11-20-75	6.42		19.9		190.0
4	11-20-75	16.77		19.9	4.7	147.7

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	********** C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	4-14-76	5.28	746.4	647.2	572.7	301.8	2248.0		369.8	200.0
1	4-14-76	16.08	52.0	113.6	96.9	9.2	312.4		0.0	0.0
1	4-15-76	5.40	376.0	342.0	292.2	141.6	1060.0		151.2	116.0
1	4-15-76	18.08	46.8	93.0	80.4	12.9	296.4		21.5	31.6
2	4-14-76	5.50	708.8	625.8	523.5	273.5	1958.4		314.2	170.8
2	4-14-76	16.33	74.8	161.0	118.5	41.1	414.0		44.5	38.3
2	4-15-76	5.57	31.6	17.1	20.0	3.6	72.4		0.0	0.0
2	4-15-76	18.33	63.2	5.8	6.1	4.4	20.7		0.0	0.0
2	4-16-76	5.30	70.8	6.7	7.2	5.3	24.4		0.0	0.0
2	4-16-76	16.33	17.5	1.6	4.6	5.6	13.2		0.0	0.0
3	4-14-76	5.67	541.8	484.2	398.7	208.6	1500.8		237.6	164.6
3	4-14-76	16.58	35.5	85.7	71.0	10.0	230.8		1.9	0.0
3	4-15-76	5.73	189.2	177.4	151.5	72.6	560.0		86.8	60.4
3	4-15-76	18.58	18.8	42.8	34.8	2.8	103.2		0.0	0.0
3	4-16-76	5.48	19.4	41.8	34.8	1.8	102.8		0.0	0.0
3	4-16-76	16.58	17.0	29.4	21.2	9.5	50.8		4.0	0.0
4	4-14-76	5.83	533.4	490.6	393.3	196.7	1489.2		241.9	143.4
4	4-14-76	16.83	50.8	70.3	189.0	14.4	417.6		5.3	6.4
4	4-15-76	5.92	13.1	6.3	95.0	3.0	133.5		0.0	0.0
4	4-15-76	18.83	12.4	2.0	53.1	4.5	50.0		0.0	0.0
4	4-16-76	5.65	14.1	2.4	45.9	1.4	41.6		0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	4-14-76	5.28		277.4	79.2	
1	4-14-76	16.08		32.8	6.9	
1	4-15-76	5.40		65.0	35.6	
1	4-15-76	18.08		27.0	8.9	
2	4-14-76	5.50		235.0	75.2	
2	4-14-76	16.33		54.7	15.3	
2	4-15-76	5.57		10.6	0.0	
2	4-15-76	18.33		4.4	0.0	
2	4-16-76	5.30		6.2	0.0	
2	4-16-76	16.33		0.0	0.0	
3	4-14-76	5.67		115.4	55.8	
3	4-14-76	16.58		22.0	4.9	
3	4-15-76	5.73		75.5	19.8	
3	4-15-76	18.58		7.2	0.0	
3	4-16-76	5.48		11.1	0.0	
3	4-16-76	16.58		4.9	0.0	
4	4-14-76	5.83		169.9	53.3	
4	4-14-76	16.83		22.3	6.0	
4	4-15-76	5.92		4.5	0.0	
4	4-15-76	18.83		0.0		
4	4-16-76	5.65		0.0	0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	4-28-76	5.13	140.6	116.2	118.8	63.6	369.6		61.6	44.0
1	4-29-76	4.80	65.8	75.2	79.5	8.3	226.8		0.0	0.0
1	4-29-76	15.33	28.4	63.0	69.3	5.5	171.2		0.0	0.0
1	4-30-76	4.70	18.8	56.4	69.0	3.6	150.0		0.0	0.0
1	4-30-76	15.88	51.4	48.0	42.1	3.1	121.2		0.0	0.0
2	4-28-76	5.32	106.0	90.6	83.7	41.7	284.8		44.4	45.6
2	4-29-76	5.00	34.8	63.8	65.7	3.6	181.2		0.0	0.0
2	4-29-76	15.55	24.8	60.4	69.0	4.3	160.0		0.0	0.0
2	4-30-76	4.90	17.0	52.3	50.8	2.0	121.4		0.0	0.0
2	4-30-76	15.78	32.9	48.8	45.3	1.9	125.8		0.0	0.0
3	4-28-76	5.48	131.4	109.2	108.0	57.6	358.0		62.4	45.6
3	4-28-76	15.08	53.2	81.2	78.9	7.0	234.8		0.0	0.0
3	4-29-76	5.18	33.4	49.9	52.5	2.9	144.8		0.0	0.0
3	4-29-76	15.78	80.0	36.4	36.4	4.8	96.0		0.0	0.0
3	4-30-76	5.07	24.2	39.8	36.4	2.2	100.3		0.0	0.0
3	4-30-76	15.72	74.2	27.5	30.0	3.4	93.2		0.0	0.0
4	4-28-76	5.68	83.8	66.6	70.8	33.3	206.4		34.0	22.7
4	4-28-76	15.33	47.4	48.0	48.3	5.8	139.6		1.5	0.0
4	4-30-76	5.28	40.6	62.4	58.1	2.3	112.4		0.0	0.0
4	4-30-76	15.62	36.0	43.4	39.0	4.2	112.0		0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	4-28-76	5.13		30.8	20.8	
1	4-29-76	4.80		24.6	10.0	
1	4-29-76	15.33		16.4	5.0	
1	4-30-76	4.70		13.3	3.3	
1	4-30-76	15.88		13.2	0.6	
2	4-28-76	5.32		41.1	35.0	
2	4-29-76	5.00		18.9	4.4	
2	4-29-76	15.55		14.9	3.6	
2	4-30-76	4.90		12.5	0.6	
2	4-30-76	15.78		13.1	0.6	
3	4-28-76	5.48		32.6	11.1	
3	4-28-76	15.08		21.0	6.9	
3	4-29-76	5.18		14.1	3.8	
3	4-29-76	15.78		9.3	2.1	
3	4-30-76	5.07		12.5	0.6	
3	4-30-76	15.72		14.5	0.7	
4	4-28-76	5.68		19.5	13.4	
4	4-28-76	15.33		16.2	3.2	
4	4-30-76	5.28		12.9	3.0	
4	4-30-76	15.62		13.4	2.3	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	5- 6-76	4.78	159.4	133.4	111.0	58.2	408.0		66.8	39.9
1	5- 6-76	16.25	61.2	100.4	101.4	5.6	302.4		1.0	0.0
1	5- 7-76	4.40	43.0	75.2	76.8	3.9	222.8		0.0	0.0
1	5- 7-76	15.58	39.4	67.2	67.5	3.4	188.0		0.0	0.0
1	5- 8-76	4.25	48.2	46.8	55.3	1.2	140.4		0.0	0.0
1	5- 8-76	15.08	12.7	48.8	43.5	0.0	130.0		0.0	0.0
2	5- 6-76	4.78	193.8	177.5	161.3	84.1	535.8		91.2	65.7
2	5- 6-76	16.50	57.8	118.4	111.9	3.0	338.8		2.8	0.0
2	5- 7-76	4.60	37.7	109.2	129.4	0.0	311.2		0.0	0.0
2	5- 7-76	15.83	60.4	83.4	81.9	0.0	210.8		0.0	0.0
2	5- 8-76	4.43	17.5	86.8	84.3	0.0	213.6		0.0	0.0
2	5- 8-76	15.33	11.5	46.4	44.4	0.0	106.4		0.0	0.0
3	5- 6-76	5.18	212.0	193.4	196.5	104.1	620.0		101.6	76.0
3	5- 6-76	16.75	55.6	119.2	96.9	2.4	315.6		0.0	0.0
3	5- 7-76	4.78	57.6	87.0	84.9	3.9	254.8		0.0	0.0
3	5- 8-76	4.62	15.5	46.6	46.2	0.0	116.0		0.0	0.0
3	5- 8-76	15.58	18.0	42.0	48.0	7.0	86.0		0.0	0.0
4	5- 6-76	5.35	272.0	254.0	262.8	136.5	820.0		135.6	107.2
4	5- 6-76	17.00	115.0	191.6	197.4	7.9	588.0		0.0	0.0
4	5- 7-76	4.95	80.2	171.0	165.0	3.9	512.0		0.0	0.0
4	5- 7-76	16.33	74.4	104.4	102.6	7.1	288.8		0.0	0.0
4	5- 8-76	4.78	40.2	116.8	122.7	0.0	329.6		0.0	0.0
4	5- 8-76	15.83	26.4	101.6	107.7	0.0	280.8		0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	5- 6-76	4.78		39.8	15.1	
1	5- 6-76	16.25		29.8	8.3	
1	5- 7-76	4.40		21.6	4.8	
1	5- 7-76	15.58		19.6	3.5	
1	5- 8-76	4.25		13.9	3.0	
1	5- 8-76	15.08		14.7	0.0	
2	5- 6-76	4.78		45.8	19.7	
2	5- 6-76	16.50		29.4	9.9	
2	5- 7-76	4.60		25.3	8.6	
2	5- 7-76	15.83		19.5	5.0	
2	5- 8-76	4.43		14.4	4.1	
2	5- 8-76	15.33		8.8	0.0	
3	5- 6-76	5.18		49.3	17.8	
3	5- 6-76	16.75		28.9	11.1	
3	5- 7-76	4.78		25.9	5.6	
3	5- 8-76	4.62		11.1	0.0	
3	5- 8-76	15.58		8.0	0.0	
4	5- 6-76	5.35		61.0	27.3	
4	5- 6-76	17.00		50.0	18.6	
4	5- 7-76	4.95		43.5	14.3	
4	5- 7-76	16.33		25.9	7.9	
4	5- 8-76	4.78		25.8	7.9	
4	5- 8-76	15.83		23.9	7.5	

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PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8- 3-76	3.50	4.8	0.6	0.3	0.9	0.9	0.0	0.0	0.0
1	8- 4-76	4.00	505.0	498.0	378.0	195.0	1400.0	0.9	226.0	183.0
2	8- 3-76	3.50	9.5	1.2	1.7	1.1	2.6	1.1	0.0	0.0
2	8- 4-76	4.00	532.0	504.0	387.0	202.0	1472.0	1.5	234.0	194.0
3	8- 3-76	3.50	4.5	0.9	0.0	1.9	1.1	0.0	0.0	0.0
3	8- 4-76	4.00	540.0	512.0	387.0	178.0	1376.0	1.1	220.9	72.6
4	8- 3-76	3.50	11.2	0.8	0.0	0.0	0.9	0.0	0.4	0.0
4	8- 4-76	4.00	576.0	542.0	420.0	218.0	1576.0	1.1	254.0	205.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	8- 3-76	3.50		5.0	0.0	
1	8- 4-76	4.00		117.0	35.0	
2	8- 3-76	3.50		3.4	0.0	
2	8- 4-76	4.00		123.0	32.7	
3	8- 3-76	3.50		0.0	0.0	
3	8- 4-76	4.00		113.0	30.7	
4	8- 3-76	3.50		6.6	0.0	
4	8- 4-76	4.00		133.0	37.7	

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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	8-24-76	4.00	8.4	2.0	0.4	0.3	1.6		0.0	0.0
1	8-24-76	5.08	2380.0	1620.0	1980.0	1320.0	10300.0		1880.0	1700.0
1	8-24-76	15.70	126.0	576.0	572.0	3.7	1850.0		2.5	0.0
1	8-24-76	5.00	40.0	510.0	507.0	6.1	1200.0		1.0	0.0
1	8-25-76	15.28	24.6	368.0	361.0	3.6	1184.7		1.0	0.0
1	8-26-76	5.83	754.9	123.0	399.0	0.0	684.0		0.0	0.0
2	8-24-76	4.00	14.0	1.0	1.5	0.3	3.2		0.0	0.0
2	8-24-76	5.22	706.0	472.0	528.0	327.0	2368.0		460.0	0.0
2	8-24-76	15.83	81.7	290.0	294.0	3.0	937.0		0.7	0.0
2	8-25-76	5.00	20.0	210.0	285.0	2.2	669.0		1.1	0.0
2	8-25-76	15.45	43.8	200.0	186.0	4.5	544.0		0.9	0.0
2	8-26-76	5.55	25.0	192.0	182.4	2.8	472.0		0.4	0.0
3	8-24-76	4.00	15.5	0.8	1.5	3.1	2.1		0.0	0.0
3	8-24-76	5.33	634.0	448.0	456.0	270.0	1980.0		400.0	0.0
3	8-24-76	16.00	75.6	244.0	257.0	1.8	760.0		0.0	0.0
3	8-25-76	5.00	27.0	221.0	220.0	2.0	700.0		0.0	0.0
3	8-25-76	15.62	21.6	198.0	184.0	1.9	556.0		0.9	0.0
3	8-26-76	5.00	15.0	132.0	123.0	1.4	416.0		0.0	0.0
4	8-24-76	4.00	6.8	0.5	1.8	0.7	2.8		0.0	0.0
4	8-24-76	5.53	276.0	172.0	183.0	132.0	1180.0		0.0	0.0
4	8-24-76	16.17	19.7	52.6	53.1	0.5	126.0		1.2	0.0
4	8-25-76	5.55	8.8	6.3	8.3	1.5	20.6		1.0	0.0
4	8-25-76	15.80	9.8	32.0	26.8	1.8	72.3		0.0	0.0
4	8-26-76	5.55	122.0	38.6	37.2	1.5	91.2		0.0	0.0

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			********** C5 COMPOUNDS **********			C7 COMPOUND
CHAMBER NUMBER	DATE	TIME (HRS. EST)	NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	TOLUENE
1	8-24-76	4.00		4.5	0.0	
1	8-24-76	5.08		760.0	0.0	2300.0
1	8-24-76	15.70		140.0	0.0	700.0
1	8-24-76	5.00		104.0	0.0	
1	8-25-76	15.28		77.4	0.0	398.0
1	8-26-76	5.83		21.5	0.0	176.0
2	8-24-76	4.00		3.2	0.0	
2	8-24-76	5.22		240.0	0.0	1050.0
2	8-24-76	15.83		71.0	0.0	758.0
2	8-25-76	5.00		39.3	0.0	177.8
2	8-25-76	15.45		37.4	0.0	267.0
2	8-26-76	5.55		36.3	0.0	157.0
3	8-24-76	4.00		2.5	0.0	
3	8-24-76	5.33		300.0	0.0	1100.0
3	8-24-76	16.00		26.0	0.0	466.0
3	8-25-76	5.00		53.8	0.0	386.8
3	8-25-76	15.62		43.8	0.0	200.0
3	8-26-76	5.00			0.0	67.2
4	8-24-76	4.00		2.2	0.0	
4	8-24-76	5.53		195.0	0.0	339.5
4	8-24-76	16.17		3.6	0.0	144.0
4	8-25-76	5.55		7.2	0.0	38.6
4	8-25-76	15.80		0.0	0.0	325.0
4	8-26-76	5.55		9.6	0.0	25.3

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9- 8-76	5.00	6900.0							
1	9- 8-76	16.00	5540.0							
1	9- 9-76	5.00	5480.0							
1	9- 9-76	14.00	4460.0							
1	9-10-76	5.50	3560.0							
1	9-10-76	16.50	2730.0							
2	9- 8-76	5.00			11700.0					
2	9- 8-76	16.00			9060.0					
2	9- 9-76	5.00			8510.0					
2	9- 9-76	14.00			7000.0					
2	9-10-76	5.50			6660.0					
2	9-10-76	16.50			4070.0					
3	9- 8-76	5.00		5550.0						
3	9- 8-76	16.00		3290.0						
3	9- 9-76	5.00		2830.0						
3	9- 9-76	14.00		1970.0						
3	9-10-76	5.50		1110.0						
3	9-10-76	16.50		490.0						
4	9- 8-76	5.00	36.0	1.6	9.0	1.8	6.4	1.6		
4	9- 8-76	16.00	52.2	0.6	3.0	1.2	2.4	1.2		
4	9- 9-76	5.00	120.0	2.0	3.0	1.2	3.2	1.2		
4	9- 9-76	14.00	12.8	3.2	2.7	2.4	2.4	0.0		
4	9-10-76	5.50	4.0	0.8	0.3	0.0	0.0	0.0		
4	9-10-76	16.50	9.2	2.4	6.0	0.0	2.0	3.6		

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	9- 8-76	5.00				
1	9- 8-76	16.00				
1	9- 9-76	5.00				
1	9- 9-76	14.00				
1	9-10-76	5.50				
1	9-10-76	16.50				
2	9- 8-76	5.00				
2	9- 8-76	16.00				
2	9- 9-76	5.00				
2	9- 9-76	14.00				
2	9-10-76	5.50				
2	9-10-76	16.50				
3	9- 8-76	5.00				
3	9- 8-76	16.00				
3	9- 9-76	5.00				
3	9- 9-76	14.00				
3	9-10-76	5.50				
3	9-10-76	16.50				
4	9- 8-76	5.00	4.0	7.0	0.0	
4	9- 8-76	16.00	4.0	2.0	0.0	
4	9- 9-76	5.00	4.5	4.5	0.0	
4	9- 9-76	14.00	3.0	0.0	0.0	
4	9-10-76	5.50	0.0	0.0	0.0	
4	9-10-76	16.50	0.0	0.0	0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9-13-76	5.00	368.0	264.0	265.0	143.0	1024.0	0.0	162.0	98.0
1	9-13-76	16.50	178.0	213.0	537.0	7.8	736.0	0.0	1.9	0.0
1	9-14-76	5.33	75.0	165.0	180.0	1.0	584.0	0.0	0.0	0.0
1	9-14-76	13.33	54.0	167.0	165.0	1.0	560.0	0.0	0.0	0.0
1	9-15-76	5.50	33.4	137.0	142.0	1.8	476.0	0.0	0.0	0.0
2	9-13-76	5.00	396.0	268.0	284.0	49.2	908.0	0.0	9.2	4.0
2	9-13-76	16.50	108.0	280.0	291.0	9.0	820.0	0.0	3.2	0.0
2	9-14-76	5.33	41.4	200.0	222.0	3.2	652.0	0.0	0.0	0.0
2	9-14-76	13.33	41.4	198.0	223.0	7.7	647.0	0.0	0.0	0.0
2	9-15-76	5.50	12.2	150.0	151.0	1.6	472.0	0.0	0.0	0.0
3	9-13-76	5.00	420.0	298.0	306.0	176.0	1184.0	0.0	187.0	153.0
3	9-13-76	16.50	86.4	214.0	213.0	1.5	724.0	0.0	2.0	0.0
3	9-14-76	5.33	33.0	150.0	160.0	3.1	572.0	0.0	0.0	0.0
3	9-14-76	13.33								
3	9-15-76	5.50								
4	9-13-76	5.00	50.0	30.2	31.4	9.2	117.0		0.0	0.0
4	9-13-76	16.50	196.0	7.8	175.0	6.0	49.7	0.0	1.6	0.0
4	9-14-76	5.33	14.0	17.0	25.0	0.0	64.0	0.0	0.0	0.0
4	9-14-76	13.33								
4	9-15-76	5.50								

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	9-13-76	5.00		87.0	20.0	1600.0
1	9-13-76	16.50		61.5	5.8	1014.0
1	9-14-76	5.33		49.0	17.1	1180.0
1	9-14-76	13.33		47.0	14.0	634.0
1	9-15-76	5.50		40.0	9.0	702.0
2	9-13-76	5.00		24.1	5.0	1182.0
2	9-13-76	16.50		63.0	17.2	490.0
2	9-14-76	5.33		52.5	11.0	407.0
2	9-14-76	13.33		50.5	18.0	368.0
2	9-15-76	5.50		36.0	8.0	323.0
3	9-13-76	5.00		99.5	28.8	793.0
3	9-13-76	16.50		57.5	19.0	351.0
3	9-14-76	5.33		52.0	16.0	289.0
3	9-14-76	13.33				
3	9-15-76	5.50				
4	9-13-76	5.00		12.0	0.6	610.0
4	9-13-76	16.50		16.5	1.9	200.0
4	9-14-76	5.33		0.0	0.0	56.0
4	9-14-76	13.33				
4	9-15-76	5.50				

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9-20-76	3.87	1317.6	0.0	10208.7	0.9	15.6	70.8	0.0	0.0
1	9-20-76	15.30	1142.0	0.2	8548.9	0.8	14.0	58.2	0.0	0.0
1	9-21-76	8.67	942.0	0.6	6960.3	0.6	14.0	49.2	0.0	0.0
1	9-21-76	15.00	879.2	0.6	6268.5	0.6	12.8	42.4	0.0	0.0
2	9-20-76	4.08	1399.2	0.0	11083.6	1.8	20.0	80.8	0.0	0.0
2	9-20-76	15.37	1330.8	0.8	10084.8	0.6	18.0	72.4	0.0	0.0
2	9-21-76	8.75	1303.6	1.2	9756.3	1.8	18.4	70.4	0.0	0.0
2	9-21-76	15.08	1109.4	1.0	8008.2	0.6	15.6	56.0	0.0	0.0
3	9-20-76	4.33	1377.8	0.0	11292.0	1.5	21.2	88.0	0.0	0.0
3	9-20-76	15.45	990.8	0.2	7807.2	0.6	15.4	59.6	0.4	0.0
3	9-21-76	8.83	762.8	5.0	6007.5	0.0	14.4	46.4	0.0	0.0
3	9-21-76	15.17	721.8	3.6	5502.0	0.3	13.2	41.6	0.0	0.0
4	9-20-76	4.50	1237.9	0.8	10263.3	1.8	22.0	84.8	0.0	0.0
4	9-20-76	15.53	1312.4	0.4	10505.4	2.1	22.0	84.0	0.0	0.0
4	9-21-76	8.92	998.0	0.6	7984.8	0.0	17.6	64.0	0.0	0.0
4	9-21-76	15.25	915.2	0.8	7167.0	0.6	17.2	57.2	0.0	0.0

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	********** C5 COMPOUNDS ********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	9-20-76	3.87	0.0	1.5	0.0	
1	9-20-76	15.30	4.5	3.8	0.0	
1	9-21-76	8.67	3.5	6.0	0.0	
1	9-21-76	15.00	4.5	6.0	0.0	
2	9-20-76	4.08	0.0	4.0	0.0	
2	9-20-76	15.37	3.0	5.0	0.0	
2	9-21-76	8.75	3.5	5.5	0.0	
2	9-21-76	15.08	2.0	5.5	0.0	
3	9-20-76	4.33	0.0	0.0	0.0	
3	9-20-76	15.45	3.0	3.8	0.0	
3	9-21-76	8.83	2.0	3.5	0.0	
3	9-21-76	15.17	2.5	6.0	0.0	
4	9-20-76	4.50	3.0	4.8	0.0	
4	9-20-76	15.53	4.5	5.5	0.0	
4	9-21-76	8.92	3.5	6.0	0.0	
4	9-21-76	15.25	4.0	7.0	0.0	

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	9-23-76	4.03	1.0	0.0	1.2	0.3	0.0	0.0	0.0	0.0
1	9-23-76	5.37	872.0	643.0	619.8	330.3	2490.8	4.4	0.8	324.8
1	9-23-76	14.92	177.6	471.2	458.1	0.9	1665.6	2.4	0.0	0.0
1	9-24-76	5.37	60.8	408.0	395.7	0.0	1390.8	2.4	0.0	0.0
1	9-24-76	17.17	15.0	311.0	298.2	0.6	944.8	2.0	0.0	0.0
1	9-25-76	5.45	12.8	296.4	284.4	0.0	926.0	2.4	0.0	0.0
1	9-25-76	17.42	63.8	178.4	191.4	1.2	565.2	2.8	0.0	0.0
2	9-23-76	4.03	5.8	1.6	3.0	0.9	3.6	1.2	0.0	0.0
2	9-23-76	5.45	601.8	437.2	430.5	236.1	1708.4	4.8	0.8	229.6
2	9-23-76	15.00	137.2	376.0	367.2	0.0	1346.0	2.4	0.0	0.0
2	9-24-76	5.45	45.4	349.6	345.9	3.0	1181.6	2.4	0.0	0.0
2	9-24-76	17.25	14.2	291.0	280.5	0.0	861.6	2.4	0.0	0.0
2	9-25-76	5.53	26.2	257.0	255.6	0.6	786.8	2.4	0.0	0.0
2	9-25-76	17.67	32.0	184.2	184.2	0.9	518.8	1.6	0.0	0.0
3	9-23-76	4.20	1.8	0.4	1.5	0.6	0.8	0.0	0.0	0.0
3	9-23-76	5.53	454.2	328.2	325.5	180.0	1290.4	2.8	0.0	178.0
3	9-23-76	15.08	156.2	280.8	277.8	2.1	1019.6	1.6	0.0	0.0
3	9-24-76	5.53	64.4	218.0	218.1	0.6	776.4	2.4	0.0	0.0
3	9-24-76	17.33	25.4	180.6	175.8	0.6	567.2	1.6	0.0	0.0
3	9-25-76	5.62	19.8	167.8	165.3	0.9	523.2	1.6	0.0	0.0
3	9-25-76	17.92	33.0	112.2	111.9	0.0	330.0	1.6	0.0	0.0
4	9-23-76	4.28	8.6	1.6	4.6	1.2	4.0	1.6	0.0	0.0
4	9-23-76	5.62	81.4	53.8	57.0	30.6	222.4	1.6	0.0	27.6
4	9-23-76	15.17	41.8	49.8	51.6	2.4	164.0	0.8	0.0	0.0
4	9-24-76	5.62	16.8	38.0	40.2	0.6	117.2	1.2	4.8	0.0
4	9-24-76	17.45	15.4	34.0	33.0	1.2	83.6	1.2	0.0	0.0
4	9-25-76	5.70	9.8	31.4	31.2	0.0	73.6	0.0	0.0	0.0
4	9-25-76	18.08	92.2	14.8	18.6	1.2	40.0	2.4	0.0	0.0

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OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 430-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	9-23-76	4.03	0.0	0.0	0.0	0.0
1	9-23-76	5.37	0.0	207.5	58.0	1654.1
1	9-23-76	14.92	1.5	134.0	30.5	735.7
1	9-24-76	5.37	2.5	112.5	17.5	592.9
1	9-24-76	17.17	0.5	71.5	13.0	536.2
1	9-25-76	5.45	6.0	79.5	13.5	293.3
1	9-25-76	17.42	10.0	46.5	6.0	221.2
2	9-23-76	4.03	2.0	5.0	0.0	25.9
2	9-23-76	5.45	3.0	153.0		844.9
2	9-23-76	15.00	0.5	120.0	21.5	590.8
2	9-24-76	5.45	7.0	98.0	18.5	443.8
2	9-24-76	17.25	2.0	65.0	11.5	330.4
2	9-25-76	5.53	3.5	59.5	9.0	253.4
2	9-25-76	17.67	7.0	40.0	5.5	204.4
3	9-23-76	4.20	0.5	0.0	0.0	65.8
3	9-23-76	5.53	0.0	114.5	26.0	692.3
3	9-23-76	15.08	0.0	89.0	23.5	443.8
3	9-24-76	5.53	4.0	67.0	13.5	250.6
3	9-24-76	17.33	0.0	45.5	8.5	199.5
3	9-25-76	5.62	0.0	61.0	7.5	231.0
3	9-25-76	17.92	6.0	28.5	4.0	115.5
4	9-23-76	4.28	2.0	5.5	0.0	107.1
4	9-23-76	5.62	2.5	28.0	5.1	196.7
4	9-23-76	15.17	3.5	18.0	0.0	142.8
4	9-24-76	5.62	3.0	13.0	0.0	150.5
4	9-24-76	17.45	0.0	7.5	0.0	127.4
4	9-25-76	5.70	0.0	7.5	0.0	125.3
4	9-25-76	18.08	8.0	11.0	0.0	116.2

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REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10- 6-76	3.57	3.8	0.0	1.5	1.2	2.8	0.0	0.0	0.0
1	10- 6-76	5.65	15.6	0.0	8.1	1346.7	1.2	0.0	0.0	0.0
1	10- 6-76	9.08	20.0	0.4	7.8	1046.4	0.8	0.0	0.0	0.0
1	10- 6-76	16.83	40.0	1.0	8.1	6.0	2.0	0.8		
2	10- 6-76	3.65	7.2	2.0	3.3	9.0	3.2	0.0	0.0	0.0
2	10- 6-76	5.77	9.4	2.2	7.2	638.4	3.2	0.0	0.0	0.0
2	10- 6-76	9.92	13.8	0.6	6.3	432.3	3.2	0.0	0.0	0.0
2	10- 6-76	16.92	7.6	2.2	6.3	120.6	3.2	0.4		
3	10- 6-76	3.73	3.4	0.0	1.2	0.6	1.6	0.0	0.0	0.0
3	10- 6-76	5.82	8.2	1.8	9.9	1212.3	4.0	0.0	0.0	0.0
3	10- 6-76	9.58	12.4	1.2	8.1	943.5	3.2	0.0	0.8	0.0
3	10- 6-76	17.00	62.0	2.0	7.8	5.1	2.4	0.8		
4	10- 6-76	3.82	3.2	0.0	0.9	0.0	0.0	0.0	0.0	0.0
4	10- 6-76	5.90	8.8	1.8	3.6	1.5	2.8	0.0	0.0	0.0
4	10- 6-76	10.02	12.4	0.0	2.7	2.1	2.4	0.0	0.0	0.0
4	10- 6-76	17.08	7.0	1.4	3.3	0.9	2.8	0.8		

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CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	10- 6-76	3.57	0.0	4.0	0.0	
1	10- 6-76	5.65	0.0	0.0	0.0	
1	10- 6-76	9.08	6.0	3.5	0.0	
1	10- 6-76	16.83				
2	10- 6-76	3.65	0.0	0.0	0.0	
2	10- 6-76	5.77	2.0	5.0	0.0	
2	10- 6-76	9.92	0.0	4.5	0.0	
2	10- 6-76	16.92				
3	10- 6-76	3.73	0.0	0.0	0.0	
3	10- 6-76	5.82	0.0	0.0	0.0	
3	10- 6-76	9.58	0.0	3.0	0.0	
3	10- 6-76	17.00				
4	10- 6-76	3.82	0.0	0.0	0.0	
4	10- 6-76	5.90	0.0	4.0	0.0	
4	10- 6-76	10.02	0.0	3.5	0.0	
4	10- 6-76	17.08				

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PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	C5 COMPOUNDS: NORMAL PENTANE	C5 COMPOUNDS: ISO-PENTANE	C5 COMPOUNDS: CYCLO-PENTANE	C7 COMPOUND: TOLUENE
1	10-11-76	2.87	0.0	0.0	0.0	
1	10-11-76	5.53	0.0	0.0	0.0	
1	10-11-76	10.50	0.0	0.0	0.0	
1	10-11-76	16.00	2.4	2.4	0.0	
1	10-12-76	8.00	0.0	5.3	0.0	
2	10-11-76	2.95	0.0	3.8	0.0	
2	10-11-76	5.62	3.4	6.1	0.0	
2	10-11-76	10.67	0.0	4.4	0.0	
2	10-11-76	16.17	3.9	0.0	0.0	
2	10-12-76	8.08				
3	10-11-76	3.03	0.0	0.0	0.0	
3	10-11-76	5.70	2.9	3.7	0.0	
3	10-11-76	9.50	1.9	3.1	0.0	
3	10-11-76	16.08	0.0	3.0	0.0	
3	10-12-76	8.17	0.0	5.4	0.0	
4	10-11-76	3.12	0.0	4.3	0.5	
4	10-11-76	5.78	0.0	4.5	0.0	
4	10-11-76	9.62	0.4	0.0	0.0	
4	10-11-76	16.25	0.0	4.1	0.0	
4	10-12-76	8.25	2.2	0.0	0.0	

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PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10-11-76	2.87	9.0	0.0	1.1	3.3	0.0	0.0	0.0	1.1
1	10-11-76	5.53	4.8	0.0	4.8	678.6	0.0	0.0	0.0	0.0
1	10-11-76	10.50	35.9	1.9	5.0	467.0	1.1	1.0	0.0	0.0
1	10-11-76	16.00	48.9	2.0	5.4	282.3	2.3	0.9	0.0	0.0
1	10-12-76	8.00	36.9	2.5	5.8	216.5	2.6	1.5	0.0	0.0
2	10-11-76	2.95	20.5	2.1	5.7	1.2	2.8	1.4	0.0	0.0
2	10-11-76	5.62	13.1	2.7	18.7	2357.3	4.6	0.0	0.0	0.0
2	10-11-76	10.67	60.5	4.7	21.0	1726.0	3.4	5.7	0.0	0.0
2	10-11-76	16.17	13.5	2.3	17.9	569.0	3.1	2.5	0.0	0.0
2	10-12-76	8.08								
3	10-11-76	3.03	8.6	2.4	3.5	1.5	2.5	0.8	0.0	0.0
3	10-11-76	5.70	8.0	2.6	10.7	1263.7	2.6	0.0	0.0	0.0
3	10-11-76	9.50	12.8	1.8	10.1	1118.9	3.0	0.0	0.0	0.0
3	10-11-76	16.08	46.4	2.7	8.9	46.5	3.3	1.2	0.0	0.0
3	10-12-76	8.17	9.7	3.1	8.3	4.1	3.7	1.3	0.0	0.0
4	10-11-76	3.12	51.9	4.5	5.5	3.7	3.4	1.2	0.0	0.0
4	10-11-76	5.78	10.2	2.8	11.0	1166.4	2.8	0.0	0.0	0.0
4	10-11-76	9.62	51.4	2.2	11.1	1010.4	2.8	0.0	0.0	0.0
4	10-11-76	16.25	71.6	3.4	9.8	139.5	3.2	1.3	0.0	0.0
4	10-12-76	8.25	9.1	2.1	8.3	18.4	3.1	0.0	0.0	0.0

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REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	10-27-76	1.57	4.9	0.6	23.7	0.0	0.4	0.0	0.0	0.0
1	10-27-76	5.90	6.4	0.0	5504.9	0.0	0.0	2.5	0.0	0.0
1	10-27-76	15.00	7.2	0.3	4439.1	2.8	0.9	2.3	0.0	0.0
1	10-28-76	5.90	8.4	1.0	3832.9	2.3	1.6	1.9	0.0	0.0
1	10-28-76	15.00	22.9	1.7	2965.0	2.1	2.3	1.9	0.0	0.0
1	10-29-76	5.90	11.0	2.6	2632.8	2.3	3.2	2.3	0.0	0.0
1	10-29-76	15.00	13.6	2.9	2193.2	1.8	3.0	1.9	0.0	0.0
2	10-27-76	4.65	6.5	0.6	3.2	0.3	1.3	0.6	0.0	0.0
2	10-27-76	5.98	12.7	0.6	10369.4	0.0	1.4	8.9	0.0	0.0
2	10-27-76	15.08	14.2	0.5	10442.4	0.9	1.5	8.9	0.0	0.0
2	10-28-76	5.98	13.6	1.1	9150.1	1.5	1.9	7.8	0.0	0.0
2	10-28-76	15.08	16.4	1.6	8716.4	0.0	2.1	7.4	0.0	0.0
2	10-29-76	5.98	36.1	3.1	7113.0	0.6	3.0	6.6	0.0	0.2
2	10-29-76	15.08	20.5	2.5	7085.5	0.6	2.4	6.2	0.0	0.0
3	10-27-76	4.73	2.6	0.4	1.5	0.4	0.6	0.4	0.4	0.0
3	10-27-76	6.07	7.4	0.7	3050.5	1.7	0.7	2.6	0.0	0.0
3	10-27-76	15.17	5.3	0.8	2666.0	2.7	1.3	2.7	0.0	0.0
3	10-28-76	6.07	6.3	1.4	1913.1	1.4	1.8	2.2	0.0	0.0
3	10-28-76	15.17	7.9	1.6	1549.2	1.5	2.2	2.0	0.0	0.0
3	10-29-76	6.07	14.6	3.8	1479.5	2.1	4.0	2.2	0.0	0.0
3	10-29-76	15.17	20.3	4.1	1165.1	1.8	3.8	1.9	0.0	0.0
4	10-27-76	4.82	6.0	0.3	2.2	0.6	0.9	0.3	0.0	0.0
4	10-27-76	6.15	5.4	0.2	1.9	0.3	0.9	0.3	0.0	0.0
4	10-27-76	15.25	6.9	1.2	2.7	1.0	2.2	0.9	0.0	0.0
4	10-28-76	6.15	7.3	1.4	2.7	0.3	2.1	0.8	0.6	0.0
4	10-28-76	15.25	11.2	1.6	2.3	0.6	2.2	1.3	0.0	0.0
4	10-29-76	6.15	11.6	3.1	6.0	1.1	3.4	1.1	1.0	0.0
4	10-29-76	15.25	19.5	3.0	3.0	0.8	3.0	1.0	0.0	0.0

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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	10-27-76	1.57	0.5	18.1	0.0	
1	10-27-76	5.90	0.0	3.9	0.0	
1	10-27-76	15.00	0.0	1.9	0.0	
1	10-28-76	5.90	0.3	0.0	0.0	
1	10-28-76	15.00	3.4	8.8	0.0	
1	10-29-76	5.90	2.2	4.8	0.0	
1	10-29-76	15.00	2.4	5.7	0.0	
2	10-27-76	4.65	0.0	2.9	0.0	
2	10-27-76	5.98	0.0	2.4	0.0	
2	10-27-76	15.08	0.4	2.3	0.0	
2	10-28-76	5.98	0.0	2.3	0.0	
2	10-28-76	15.08	0.8	5.1	0.0	
2	10-29-76	5.98	1.6	4.1	0.0	
2	10-29-76	15.08	3.4	8.4	0.0	
3	10-27-76	4.73	0.0	0.0	0.0	
3	10-27-76	6.07	1.2	12.2	0.0	
3	10-27-76	15.17	0.5	1.7	0.0	
3	10-28-76	6.07	1.0	1.7	0.0	
3	10-28-76	15.17	2.0	4.7	0.0	
3	10-29-76	6.07	1.8	4.3	0.0	
3	10-29-76	15.17	3.0	7.1	0.0	
4	10-27-76	4.82	0.0	3.9	0.0	
4	10-27-76	6.15	0.0	0.6	0.0	
4	10-27-76	15.25	0.0	4.9	0.0	
4	10-28-76	6.15	0.7	1.9	0.0	
4	10-28-76	15.25	1.3	6.7	0.0	
4	10-29-76	6.15	2.3	5.7	0.0	
4	10-29-76	15.25	3.2	6.4	0.0	

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HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	11- 5-76	4.70	1.7	0.0	0.7	0.5	0.3	0.0	0.0	0.0
1	11- 5-76	5.83	2.2	0.3	11.1	1700.9	0.0	0.0	0.0	0.0
1	11- 5-76	16.67	5.3	3.4	13.5	218.2	2.5	1.3	0.0	0.0
1	11- 6-76	6.58	49.8	4.1	18.8	83.9	3.3	2.0	0.0	0.0
1	11- 6-76	16.53	8.2	3.5	7.8	16.6	2.9	1.0	0.0	0.0
1	11- 7-76	6.75	9.1	3.6	7.5	6.3	3.5	1.3	0.0	0.0
1	11- 7-76	16.00	23.0	4.2	8.0	1.0	4.1	1.2	0.0	0.0
1	11- 8-76	6.20	10.9	3.6	7.7	0.0	3.6	1.4	0.0	0.0
2	11- 5-76	4.78	10.4	2.1	3.4	0.9	3.7	1.3	0.0	0.0
2	11- 5-76	6.00	12.9	2.4	24.1	3314.3	6.7	0.0	0.0	0.0
2	11- 5-76	16.75	21.2	3.7	22.3	55.1	4.1	2.2	0.0	0.0
2	11- 6-76	6.70	24.6	4.0	38.1	2.5	4.4	2.4	0.0	0.0
2	11- 6-76	16.62	24.7	4.5	19.7	0.4	4.3	1.8	0.0	0.0
2	11- 7-76	6.88	17.6	3.8	17.5	0.4	4.2	1.5	0.0	0.0
2	11- 7-76	16.08	40.8	5.6	18.6	0.5	4.3	1.6	0.0	0.0
2	11- 8-76	6.28	15.0	3.3	13.9	0.4	3.7	1.4	0.0	0.0
3	11- 5-76	4.87	10.4	2.0	2.7	0.9	2.7	1.1	0.0	0.0
3	11- 5-76	6.20	12.9	2.0	2557.1	6.7	3.1	3.4	0.0	0.0
3	11- 5-76	16.83	13.3	3.7	1897.9	2.6	3.0	2.7	0.0	0.0
3	11- 6-76	6.83	68.9	4.1	1561.4	2.5	3.9	4.0	0.0	0.0
3	11- 6-76	16.70	20.5	2.7	1196.1	0.0	2.9	2.0	0.0	0.0
3	11- 7-76	6.95	17.2	3.3	1108.5	2.0	3.8	2.2	0.0	0.0
3	11- 7-76	16.17	55.5	4.3	806.8	1.1	3.9	2.1	0.0	0.0
3	11- 8-76	6.37	137.1	3.7	512.3	0.7	4.1	2.9	0.0	0.0
4	11- 5-76	4.95	8.4	1.1	2.8	0.6	1.8	0.0	0.0	0.0
4	11- 5-76	6.33	9.7	0.9	2814.0	4.7	2.1	3.1	0.0	0.0
4	11- 5-76	16.92	58.9	2.0	2114.3	3.1	2.7	3.6	0.0	0.0
4	11- 6-76	6.92	11.8	2.3	2046.9	2.2	2.7	2.7	0.0	0.0
4	11- 6-76	16.78	35.6	3.5	1605.5	1.9	2.5	2.2	0.0	0.0
4	11- 7-76	7.10	13.4	2.2	1514.3	0.0	2.7	2.2	0.0	0.0
4	11- 7-76	16.25	20.0	4.0	1328.4	1.1	2.9	2.1	0.0	0.0
4	11- 8-76	6.45	57.2	3.8	1078.2	1.4	3.7	2.6	0.0	0.0

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	11- 5-76	4.70	0.0	1.5	0.0	
1	11- 5-76	5.83	0.0	0.0	0.0	
1	11- 5-76	16.67	0.9	3.0	0.0	
1	11- 6-76	6.58	1.1	11.4	0.0	
1	11- 6-76	16.53	0.0	3.7	0.0	
1	11- 7-76	6.75	2.4	5.1	0.0	
1	11- 7-76	16.00	2.8	6.0	0.0	
1	11- 8-76	6.20	0.8	2.4	0.0	
2	11- 5-76	4.78	1.7	4.6	0.0	
2	11- 5-76	6.00	0.6	4.9	0.0	
2	11- 5-76	16.75	1.4	10.6	0.0	
2	11- 6-76	6.70	3.0	13.8	0.0	
2	11- 6-76	16.62	0.0	7.3	0.0	
2	11- 7-76	6.88	2.5	5.3	0.0	
2	11- 7-76	16.08	2.5	6.4	0.0	
2	11- 8-76	6.28	1.9	3.6	0.0	
3	11- 5-76	4.87	1.1	4.5	0.0	
3	11- 5-76	6.20	1.0	3.7	0.0	
3	11- 5-76	16.83	1.9	3.9	0.0	
3	11- 6-76	6.83	3.5	24.1	0.0	
3	11- 6-76	16.70	2.7	6.6	0.0	
3	11- 7-76	6.95	2.4	3.9	0.0	
3	11- 7-76	16.17	2.8	9.3	0.0	
3	11- 8-76	6.37	3.6	7.2	0.0	
4	11- 5-76	4.95	1.1	3.4	0.0	
4	11- 5-76	6.33	0.9	1.7	0.0	
4	11- 5-76	16.92	2.5	19.5	0.0	
4	11- 6-76	6.92	1.7	2.8	0.0	
4	11- 6-76	16.78	1.0	4.2	0.0	
4	11- 7-76	7.10	2.7	3.7	0.0	
4	11- 7-76	16.25	1.2	3.6	0.0	
4	11- 8-76	6.45	2.1	5.1	0.0	

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 43U-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART ONE OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	***C2 COMPOUNDS**** ETHANE OR ETHENE	ACETYLENE	**C3 COMPOUNDS*** PROPANE	PROPENE	**********C4 COMPOUNDS********** NORMAL BUTANE	ISO-BUTANE	1-BUTENE	TRANS-2-BUTENE
1	11-11-76	5.78	25.8	0.7	3.2	0.5	1.3	0.5	0.0	0.0
1	11-11-76	6.03	699.4	551.3	488.0	260.0	1587.2	4.2	247.2	230.3
1	11-11-76	16.08	585.9	308.1	304.1	1.6	978.8	2.5	0.8	0.0
1	11-12-76	6.37	172.4	418.3	373.7	0.9	1109.9	3.0	0.0	0.0
1	11-12-76	16.50	155.4	328.7	292.1	0.7	869.7	3.3	0.0	0.0
1	11-13-76	6.37	141.3	259.2	235.3	1.0	701.0	3.2	0.0	0.0
1	11-13-76	18.20	82.4	257.3	227.5	1.1	671.6	2.8	0.0	0.0
1	11-14-76	6.45	102.6	218.1	206.3	1.9	557.0	4.8	0.0	0.0
1	11-14-76	16.42	120.3	188.9	172.9	1.3	502.5	5.9	0.0	0.0
2	11-11-76	5.95	19.7	4.0	10.7	1.5	4.9	1.9	0.0	0.0
2	11-11-76	6.20	398.8	270.6	250.4	132.5	774.5	4.5	120.4	93.6
2	11-11-76	16.17	183.1	232.2	210.5	6.3	608.6	2.7	3.4	0.0
2	11-12-76	6.45	140.8	210.2	191.9	2.9	556.6	3.1	1.4	0.0
2	11-12-76	16.58	144.0	206.9	187.8	1.4	542.4	3.4	0.0	0.0
2	11-13-76	6.45	129.4	189.9	174.7	2.9	486.3	4.0	0.0	0.0
2	11-13-76	18.27	97.1	181.6	164.1	2.1	468.9	3.6	0.0	0.0
2	11-14-76	6.53	108.7	163.2	151.7	1.4	420.4	4.1	0.0	0.0
2	11-14-76	16.50	108.4	150.4	136.9	1.5	369.0	3.5	0.0	0.0
3	11-11-76	4.12	38.4	4.6	9.0	1.4	4.4	2.0	0.0	0.0
3	11-11-76	6.37	320.4	245.9	226.8	118.3	697.7	3.4	110.6	119.4
3	11-11-76	16.25	170.8	207.1	187.4	3.8	546.9	2.3	0.0	0.0
3	11-12-76	6.53	125.1	184.9	167.5	2.7	494.8	2.6	0.0	0.0
3	11-12-76	16.67	169.8	144.3	135.0	1.3	387.1	3.5	0.0	0.0
3	11-13-76	6.53	90.3	128.6	116.0	1.8	343.6	5.6	0.0	0.0
3	11-13-76	18.42	63.9	101.5	92.4	1.4	260.7	3.2	0.0	0.0
3	11-14-76	6.62	55.8	85.5	78.7	2.2	218.7	3.4	0.0	0.0
3	11-14-76	16.58	90.6	82.3	77.2	1.4	210.9	3.8	0.0	0.0
4	11-11-76	4.28	43.4	4.3	9.3	1.4	4.6	2.0	0.0	0.0
4	11-11-76	6.53	83.6	54.1	53.1	25.6	153.7	1.7	25.9	20.4
4	11-11-76	16.33	45.7	46.2	43.5	0.7	115.4	1.3	0.0	0.0
4	11-12-76	6.62	39.3	47.3	42.4	1.2	114.4	1.7	0.0	0.0
4	11-12-76	16.83	52.0	34.4	31.2	1.0	81.8	1.8	0.0	0.0
4	11-13-76	6.62	37.4	32.6	32.3	2.4	73.0	4.0	0.0	0.0
4	11-13-76	18.50	65.1	28.1	28.5	1.6	59.0	4.8	0.0	0.0
4	11-14-76	6.70	102.4	23.7	29.1	2.8	46.2	6.2	0.0	0.0
4	11-14-76	16.67	24.7	21.9	22.2	1.1	43.0	2.1	0.0	0.0

RESEARCH TRIANGLE INSTITUTE
OUTDOOR SMOG CHAMBER STUDY

RTI PROJECT NO. 430-1154
USEPA CONTRACT NO. 68-02-2207

HYDROCARBON DATA
REPORTED IN PARTS PER BILLION CARBON
PART TWO OF TWO

CHAMBER NUMBER	DATE	TIME (HRS. EST)	**********C5 COMPOUNDS********** NORMAL PENTANE	ISO-PENTANE	CYCLO-PENTANE	C7 COMPOUND TOLUENE
1	11-11-76	3.78	0.0	2.2	0.0	
1	11-11-76	6.03	0.0	148.9	58.7	7490.0
1	11-11-76	16.08	7.0	98.1	31.3	
1	11-12-76	6.37	1.7	103.6	35.4	
1	11-12-76	16.50	5.4	83.5	28.7	
1	11-13-76	6.37	3.5	69.6	23.2	
1	11-13-76	18.20	7.1	76.0	24.2	
1	11-14-76	6.45	5.7	56.8	15.9	
1	11-14-76	16.42	4.7	54.9	15.9	
2	11-11-76	3.95	2.7	5.0	0.0	
2	11-11-76	6.20	6.3	89.5	31.4	4310.0
2	11-11-76	16.17	4.6	61.6	19.1	
2	11-12-76	6.45	4.3	59.1	18.8	
2	11-12-76	16.58	1.5	56.6	18.8	
2	11-13-76	6.45	4.8	52.0	15.9	
2	11-13-76	18.27	4.3	48.8	14.6	
2	11-14-76	6.53	5.4	47.5	11.8	
2	11-14-76	16.50	5.4	39.9	10.4	
3	11-11-76	4.12	3.4	6.1	0.0	
3	11-11-76	6.37	4.4	73.5	27.0	4450.0
3	11-11-76	16.25	2.3	53.6	19.2	
3	11-12-76	6.53	2.6	50.5	16.6	
3	11-12-76	16.67	4.4	45.2	12.3	
3	11-13-76	6.53	4.2	40.1	10.5	
3	11-13-76	18.42	3.8	31.3	8.7	
3	11-14-76	6.62	0.0	28.2	6.8	
3	11-14-76	16.58	4.8	26.3	6.7	
4	11-11-76	4.28	3.3	5.4	0.0	
4	11-11-76	6.53	0.0	18.1	10.4	540.0
4	11-11-76	16.33	0.0	13.0	4.0	
4	11-12-76	6.62	0.0	15.4	0.0	
4	11-12-76	16.83	4.5	13.3	2.9	
4	11-13-76	6.62	4.2	16.1	0.0	
4	11-13-76	18.50	4.2	11.1	0.0	
4	11-14-76	6.70	5.5	13.8	0.0	
4	11-14-76	16.67	0.0	9.5	0.0	

APPENDIX B

DETAILED LISTINGS OF CONCENTRATION AND ENVIRONMENTAL DATA

Note that data sheets are listed in chronological order; see Tables 2 and 3 in Volume 1 for a summary of the experimental program.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 2 7-17-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2* (PPM)	NOX* (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000				0.42	0.14	0.29	0.00				
1.30	0.000				2.38	0.13	2.25	7.44				
2.30	0.000				6.00	0.14	5.86	7.42				
3.30	0.000				6.80	0.12	6.67	7.33				
4.30	0.000	0.428			6.74	0.14	6.61	7.39				
5.30	0.000	0.419			6.64	0.13	6.51	7.12				
6.30	0.000	0.357			5.88	0.13	5.74	6.27				
7.30	0.000	0.310			5.23	0.18	5.05	5.47				
8.30	0.000	0.233			4.53	0.14	4.40	4.74				
9.30	0.000	0.151			3.88	0.12	3.76	4.15				
10.30	0.086	0.050			3.28	0.12	3.16	3.62				
11.30	0.083	0.017			2.78	0.11	2.67	3.11	0.185	0.001	0.033	
12.30	0.204				2.40	0.08	2.32	2.74				
13.30	0.252				2.06	0.08	1.98	2.31				
14.30	0.265				1.79	0.12	1.66	2.12				
15.30	0.246				1.60	0.12	1.47	1.84				
16.30	0.234				1.37	0.10	1.27	1.58				
17.30	0.202				1.22	0.07	1.15	1.39				
18.30	0.167				1.04	0.07	0.97	1.22				
19.30	0.133				1.01	0.09	0.92	1.00				
20.30	0.098				0.93	0.12	0.81	0.89				
21.30	0.074				0.83	0.07	0.76	0.81				
22.30	0.056				0.79	0.09	0.70	0.64				
23.30	0.043				0.73	0.05	0.68	0.56				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	20.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.0	0.00	0.00			
5.30		0.01	0.18	51.82	5.17	
6.30		0.06	1.68			
7.30	21.1	0.14	6.72			
8.30		0.19	16.02			
9.30		0.47	32.46			
10.30	23.9	0.62	63.36			
11.30		0.77	103.26			
12.30		0.67	147.66			
13.30	25.6	0.39	182.82			
14.30		0.39	206.22			
15.30		0.36	229.08			
16.30	24.4	0.29	249.42			
17.30		0.17	264.66			
18.30		0.10	273.60			
19.30	22.8	0.02	278.16			
20.30		0.00	279.00			
21.30		0.00	279.00			
22.30	21.1	0.00	279.00			
23.30		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 15

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

*Malfunction of the NO/NO_x instrument prevented the determination of $[NO_2]$ throughout the run and [NO] after 1200 EST, 17 July 75.

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RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 2 7-18-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.030				0.69	0.08	0.61	0.51				
1.30	0.021				0.65	0.06	0.60	0.41				
2.30	0.014				0.63	0.06	0.57	0.37				
3.30	0.011				0.54	0.07	0.47	0.26				
4.30	0.008											
5.30	0.004				0.53	0.02	0.50	0.24				
6.30	0.004				0.54	0.02	0.52	0.26				
7.30	0.021				0.56	0.02	0.53	0.32				
8.30	0.043				0.57	0.02	0.55	0.29				
9.30	0.078				0.64	0.05	0.59	0.23				
10.30	0.095				0.63	0.05	0.58	0.23				
11.30	0.091				0.61	0.05	0.56	0.23				
12.30	0.098				0.63	0.05	0.58	0.29				
13.30	0.106				0.68	0.06	0.62	0.29				
14.30	0.151				0.75	0.07	0.67	0.29				
15.30	0.161				0.69	0.05	0.65	0.29				
16.30	0.170				0.68	0.06	0.62	0.29				
17.30	0.171				0.67	0.05	0.62	0.29				
18.30												
19.30												
20.30												
21.30												
22.30												

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.0	0.00	0.00			
5.30		0.03	0.54	51.82		5.17
6.30		0.22	5.76			
7.30	21.7	0.36	21.48			
8.30		0.65	48.30			
9.30		0.43	83.34			
10.30	23.9	0.30	106.80			
11.30		0.27	124.26			
12.30		0.53	145.14			
13.30	22.2	1.05	186.30			
14.30		0.92	246.96			
15.30		0.72	298.56			
16.30	25.6	0.68	341.04			
17.30		0.48	378.24			
18.30		0.14	400.92			
19.30	24.4	0.01	406.98			
20.30		0.00	407.40			
21.30		0.00	407.40			
22.30	21.1	0.00	407.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 2 7-17-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2* (PPM)	NOX* (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000				1.01	0.80	0.21	0.00				
1.47	0.000				1.36	0.80	0.56	8.35				
2.47	0.000				3.77	0.81	2.95	8.44				
3.47	0.000				4.49	0.78	3.71	8.32				
4.47	0.000	0.125			4.43	0.82	3.61	8.30				
5.47	0.000	0.123			4.30	0.80	3.50	7.94				
6.47	0.000	0.099			3.81	0.76	3.05	6.78				
7.47	0.000	0.078			3.32	0.67	2.65	5.87				
8.47	0.021	0.024			2.86	0.63	2.24	4.97				
9.47	0.095	0.017			2.42	0.63	1.79	4.24		**0.012	0.022	
10.47	0.193	0.011			2.11	0.60	1.51	3.60				
11.47	0.279	0.012			1.84	0.60	1.24	3.10				
12.47	0.329				1.65	0.55	1.10	2.67				
13.47	0.299				1.42	0.58	0.84	2.27				
14.47	0.261				1.31	0.54	0.77	1.93				
15.47	0.219				1.18	0.56	0.62	1.64				
16.47	0.182				1.10	0.50	0.61	1.36				
17.47	0.150				0.98	0.50	0.48	1.14				
18.47	0.118				0.94	0.47	0.47	0.97				
19.47	0.092				0.94	0.44	0.50	0.79				
20.47	0.067				0.90	0.44	0.46	0.64				
21.47	0.050				0.82	0.44	0.38	0.53				
22.47	0.035				0.75	0.44	0.31	0.50				
23.47	0.023				0.77	0.41	0.36	0.40				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	20.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.0	0.00	0.00			
5.47		0.01	0.28	65.70	5.17	
6.47		0.06	2.28			
7.47	21.1	0.14	8.12			
8.47		0.19	17.92			
9.47		0.47	57.16			
10.47	23.9	0.62	69.56			
11.47		0.77	110.96			
12.47		0.67	154.36			
13.47	25.6	0.39	186.72			
14.47		0.39	210.12			
15.47		0.36	232.68			
16.47	24.4	0.29	252.32			
17.47		0.17	266.56			
18.47		0.10	274.60			
19.47	22.8	0.02	278.56			
20.47		0.00	279.00			
21.47		0.00	279.00			
22.47	21.1	0.00	279.00			
23.47		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 15

RDU AIRPORT MAXIMUM TEMPERATURE 80.0 CENT

*Malfunction of the NO/NO_x instrument prevented the determination of $[NO_2]$ throughout the run and [NO] after 1200 EST, 17 July 75.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 2 7-18-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOXI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.015											
1.47	0.010				0.75	0.38	0.37	0.36				
2.47	0.007				0.75	0.35	0.40	0.27				
3.47	0.003				0.71	0.38	0.32	0.25				
4.47	0.002				0.69	0.36	0.33	0.22				
5.47	0.000				0.67	0.37	0.29	0.15				
6.47	0.002				0.71	0.37	0.34	0.15				
7.47	0.021				0.67	0.35	0.32	0.16				
8.47	0.043				0.65	0.33	0.32	0.21				
9.47	0.068				0.69	0.33	0.35	0.18				
10.47	0.080											
11.47	0.075				0.75	0.33	0.42	0.15				
12.47	0.086				0.82	0.27	0.54	0.16				
13.47	0.096				0.82	0.21	0.61	0.16				
14.47	0.135				0.82	0.22	0.61	0.16				
15.47	0.144				0.88	0.22	0.65	0.11				
16.47	0.152				0.80	0.25	0.54	0.23				
17.47	0.155				0.83	0.29	0.54	0.26				
18.47					0.75	0.33	0.43	0.18				
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.0	0.00	0.00			
5.47		0.03	0.84	65.70		5.17
6.47		0.22	7.96			
7.47	21.7	0.36	25.08			
8.47		0.65	54.80			
9.47		0.43	87.64			
10.47	23.9	0.30	109.80			
11.47		0.27	126.96			
12.47		0.53	150.44			
13.47	22.2	1.05	196.80			
14.47		0.92	256.16			
15.47		0.72	305.76			
16.47	25.6	0.68	347.84			
17.47		0.48	383.04			
18.47		0.14	402.52			
19.47	24.4	0.01	407.08			
20.47		0.00	407.40			
21.47		0.00	407.40			
22.47	21.1	0.00	407.40			
23.47		0.00	407.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 80.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 2 7-17-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2* (PPM)	NOX* (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000				0.50	0.18	0.32	0.00				
1.63	0.000				0.73	0.15	0.58	7.66				
2.63	0.000				2.97	0.17	2.80	7.59				
3.63	0.000				3.66	0.17	3.49	7.49				
4.63	0.000	0.306			3.61	0.19	3.42	7.45				
5.63	0.000	0.287			3.43	0.17	3.26	6.96				
6.63	0.000	0.245			2.97	0.19	2.78	5.98				
7.63	0.000	0.214			2.64	0.17	2.47	5.21				
8.63	0.000	0.157			2.27	0.15	2.12	4.46				
9.63	0.000	0.102			1.88	0.15	1.73	3.81		**0.009	0.009	
10.63	0.009	0.042			1.66	0.13	1.53	3.52				
11.63	0.050	0.021			1.44	0.10	1.34	2.74				
12.63	0.108				1.18	0.08	1.09	2.34				
13.63	0.120				1.07	0.08	0.99	2.02				
14.63	0.121				0.98	0.09	0.89	1.69				
15.63	0.112				0.82	0.09	0.73	1.41				
16.63	0.104				0.75	0.11	0.65	1.22				
17.63	0.086				0.69	0.10	0.60	1.00				
18.63	0.074				0.66	0.07	0.59	0.88				
19.63	0.053				0.64	0.07	0.56	0.73				
20.63	0.037				0.58	0.07	0.50	0.63				
21.63	0.026				0.54	0.07	0.47	0.53				
22.63	0.018				0.54	0.07	0.47	0.41				
23.63	0.011				0.54	0.07	0.48	0.35				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	20.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.0	0.00	0.00			
5.63		0.01	0.38	58.05	5.17	
6.63		0.06	2.88			
7.63	21.1	0.14	9.52			
8.63		0.19	19.82			
9.63		0.47	41.86			
10.63	23.9	0.62	75.76			
11.63		0.77	118.66			
12.63		0.67	161.06			
13.63	25.6	0.59	190.62			
14.63		0.39	214.02			
15.63		0.36	236.28			
16.63	24.4	0.29	255.22			
17.63		0.17	268.06			
18.63		0.10	275.60			
19.63	22.8	0.02	278.56			
20.63		0.00	279.00			
21.63		0.00	279.00			
22.63	21.1	0.00	279.00			
23.63		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 15

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

*Malfunction of the NO/NO_x instrument prevented the determination of [NO_2] throughout the run and [NO] after 1200 EST, 17 July 75.

**Data suspect and discarded.

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RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 2 OF 2 7-18-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	WBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.009				0.50	0.05	0.45	0.33				
1.63	0.004				0.50	0.07	0.42	0.29				
2.63	0.003				0.48	0.07	0.41	0.22				
3.63	0.001				0.42	0.06	0.36	0.21				
4.63	0.001				0.48	0.06	0.42	0.17				
5.63	0.001				0.43	0.07	0.35	0.15				
6.63	0.005				0.45	0.06	0.39	0.16				
7.63	0.021				0.42	0.07	0.35	0.26				
8.63	0.040				0.45	0.07	0.38	0.23				
9.63	0.061				0.49	0.03	0.46	0.18				
10.63	0.069				0.56	0.07	0.49	0.18				
11.63	0.064				0.60	0.07	0.52	0.16				
12.63	0.079				0.61	0.00	0.61	0.19				
13.63	0.092				0.61	0.00	0.61	0.24				
14.63	0.122				0.62	0.00	0.62	0.18				
15.63	0.128				0.63	0.00	0.63	0.22				
16.63	0.133				0.63	0.07	0.56	0.27				
17.63	0.133				0.63	0.14	0.50	0.27				
18.63												
19.63												
20.63												
21.63												
22.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.0	0.00	0.00			
5.63		0.03	1.14	58.05		5.17
6.63		0.22	10.16			
7.63	21.7	0.36	28.68			
8.63		0.65	61.30			
9.63		0.43	91.94			
10.63	23.9	0.30	112.80			
11.63		0.27	129.66			
12.63		0.53	155.74			
13.63	22.2	1.05	207.50			
14.63		0.92	265.36			
15.63		0.72	312.96			
16.63	25.6	0.68	354.64			
17.63		0.48	387.84			
18.63		0.14	403.72			
19.63	24.4	0.01	407.14			
20.63		0.00	407.40			
21.63		0.00	407.40			
22.63	21.1	0.00	407.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 2 7-17-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2* (PPM)	NOX* (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000				0.39	0.00	0.39	0.00				
1.80	0.000				0.48	0.00	0.48	8.61				
2.80	0.000				1.06	0.00	1.06	8.56				
3.80	0.000				1.14	0.00	1.14	8.54				
4.80	0.000	0.043			1.19	0.00	1.19	8.46				
5.80	0.000	0.043			1.07	0.00	1.07	7.71				
6.80	0.000	0.042			0.88	0.00	0.88	6.57				
7.80	0.000	0.043			0.80	0.00	0.80	5.57				
8.80	0.007	0.032			0.69	0.00	0.69	4.70		**0.010	0.008	
9.80	0.031	0.013			0.59	0.00	0.59	3.98				
10.80	0.075	0.012			0.50	0.00	0.50	3.32				
11.80	0.125	0.014			0.43	0.00	0.43	2.78				
12.80	0.156				0.35	0.00	0.35	2.33				
13.80	0.139				0.41	0.00	0.41	1.98				
14.80	0.120				0.42	0.00	0.42	1.62				
15.80	0.101				0.39	0.00	0.39	1.39				
16.80	0.086				0.34	0.00	0.34	1.15				
17.80	0.069				0.34	0.00	0.34	0.94				
18.80	0.053				0.36	0.00	0.36	0.77				
19.80	0.043				0.39	0.00	0.39	0.63				
20.80	0.031				0.35	0.00	0.35	0.56				
21.80	0.021				0.35	0.00	0.35	0.50				
22.80	0.014				0.31	0.00	0.31	0.38				
23.80	0.010				0.29	0.00	0.29	0.35				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	20.6	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.0	0.00	0.00			
5.80		0.01	0.48	62.58	5.17	
6.80		0.06	3.48			
7.80	21.1	0.14	10.92			
8.80		0.19	21.72			
9.80		0.47	46.56			
10.80	23.9	0.62	81.96			
11.80		0.77	126.36			
12.80		0.67	164.40			
13.80	25.6	0.39	190.32			
14.80		0.39	213.72			
15.80		0.36	235.68			
16.80	24.4	0.29	253.92			
17.80		0.17	265.56			
18.80		0.10	272.40			
19.80	22.8	0.02	274.56			
20.80		0.00	274.80			
21.80		0.00	274.80			
22.80	21.1	0.00	274.80			
23.80		0.00	274.80			

% POSSIBLE MINUTES OF SUNSHINE 15

RDU AIRPORT MAXIMUM TEMPERATURE 80.0 CENT

*Malfunction of the NO/NO_x instrument prevented and determination of $[NO_2]$ through the run and [NO] after 1200 EST, 17 July 75.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 2 7-18-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	VMHC (PPM)	CO (PPM)	VBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.006				0.35	0.00	0.35	0.30				
1.80	0.003				0.34	0.00	0.34	0.26				
2.80	0.002				0.33	0.00	0.33	0.22				
3.80	0.001				0.33	0.00	0.33	0.16				
4.80	0.001				0.29	0.00	0.29	0.14				
5.80	0.001				0.29	0.00	0.29	0.11				
6.80	0.003				0.35	0.00	0.35	0.16				
7.80	0.013				0.33	0.00	0.33	0.21				
8.80	0.030				0.36	0.00	0.36	0.16				
9.80	0.043				0.44	0.00	0.44	0.11				
10.80	0.047				0.48	0.00	0.48	0.15				
11.80	0.044				0.52	0.00	0.52	0.14				
12.80	0.060				0.50	0.00	0.50	0.12				
13.80	0.074				0.44	0.00	0.44	0.15				
14.80	0.092	0.000	0.012	0.012	0.52	0.00	0.52	0.18				
15.80	0.096	0.000	0.012	0.012	0.55	0.00	0.55	0.15				
16.80	0.099	0.000	0.012	0.012	0.54	0.00	0.54	0.15				
17.80	0.097	0.000	0.011	0.011	0.59	0.00	0.59	0.15				
18.80												
19.80												
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.1	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.0	0.00	0.00			
5.80		0.03	1.44	62.58		5.17
6.80		0.22	12.36			
7.80	21.7	0.36	32.28			
8.80		0.65	67.80			
9.80		0.43	96.24			
10.80	23.9	0.30	115.80			
11.80		0.27	132.36			
12.80		0.53	161.04			
13.80	22.2	1.05	217.80			
14.80		0.92	274.56			
15.80		0.72	320.16			
16.80	25.6	0.68	361.44			
17.80		0.48	392.64			
18.80		0.14	405.12			
19.80	24.4	0.01	407.28			
20.80		0.00	407.40			
21.80		0.00	407.40			
22.80	21.1	0.00	407.40			
23.80		0.00	407.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 80.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 7-22-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000	1.58	0.06	1.52	0.00				
1.13	0.000	0.000	0.000	0.000	1.55	0.06	1.49	0.00				
2.13	0.000	0.021	0.209	0.230	5.00	0.11	4.89	8.73				
3.13	0.000											
4.13	0.000	0.817	0.207	1.025	11.55	0.10	11.45	8.59				
5.13	0.000	0.802	0.214	1.016	11.55	0.10	11.45	8.58				
6.13	0.000	0.764	0.235	0.999	11.31	0.11	11.20	8.61				
7.13	0.000	0.610	0.356	0.966	10.84	0.11	10.73	8.53				
8.43	0.003	0.152	0.706	0.858	10.13	0.13	10.00	8.52				
9.23	0.053	0.013	0.785	0.798	9.42	0.15	9.27	8.57				
10.37	0.360	0.000	0.642	0.642	8.71	0.14	8.57	8.63				
11.78	0.956	0.000	0.349	0.349	8.00	0.19	7.81	8.78				
12.80	1.241	0.000	0.238	0.238	7.29	0.13	7.15	8.93				
13.78	*	0.000	0.202	0.202	6.58	0.16	6.42	8.94	1.572	0.041	0.223	
14.47	1.241	0.000	0.178	0.178	5.87	0.15	5.71	9.08				
15.42	1.219	0.000	0.145	0.145	5.15	0.16	4.99	9.10				
16.77	0.998											
17.00	0.964	0.000	0.108	0.108	4.48	0.16	4.32	7.87				
18.02	0.783	0.000	0.081	0.081	3.91	0.15	3.76	6.69				
19.02	0.652	0.000	0.064	0.064	3.52	0.11	3.40	5.82				
20.32	0.502	0.000	0.051	0.051	3.15	0.10	3.05	4.81				
21.47	0.391	0.000	0.040	0.040	2.91	0.08	2.83	4.12				
22.00												
23.28	0.196	0.000	0.020	0.020	2.00	0.10	1.90	2.99				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	22.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	21.7	0.00	0.00			
5.13		0.03	0.24			
6.13		0.20	3.40			
7.13	23.3	0.45	17.40			
8.43		0.72	59.52			
9.23		1.00	98.00			
10.37	28.9	1.21	170.62			
11.78		0.98	262.66			
12.80		1.35	340.20			
13.78	31.1	1.01	403.87			
14.47		1.15	449.20			
15.42		0.86	507.50			
16.77	30.6	0.59	564.74	51.82	16.00	
17.00		0.22	573.00			
18.02		0.12	586.32			
19.02	27.2	0.01	593.41			
20.32		0.00	594.00			
21.47		0.00	594.00			
22.00	23.3	0.00	594.00			
23.28		0.00	594.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

* Reading Off-Scale

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 7-23-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.28	0.198	0.000	0.022	0.022	2.31	0.11	2.19	2.70				
1.47	0.145	0.000	0.021	0.021	2.15	0.05	2.10	2.25				
2.55	0.109	0.000	0.019	0.019	2.05	0.08	1.97	1.96				
3.55	0.081	0.000	0.017	0.017	2.00	0.06	1.94	1.66				
4.25	0.060	0.000	0.016	0.016	1.83	0.06	1.77	1.48				
5.40	0.040	0.000	0.016	0.016	1.75	0.06	1.69	1.20				
6.40	0.030	0.000	0.021	0.021	1.68	0.07	1.61	1.07				
7.40	0.033	0.000	0.025	0.025	1.60	0.10	1.49	0.95				
8.78	0.044	0.000	0.025	0.025	1.57	0.10	1.48	0.83	0.045	0.015	0.052	
9.88	0.102	0.000	0.025	0.025	1.55	0.09	1.46	0.73				
10.95	0.160	0.000	0.024	0.024	1.53	0.11	1.42	0.61				
11.15	0.160	0.000	0.021	0.021	1.43	0.09	1.34	0.51				
12.47	0.139	0.000	0.019	0.019	1.36	0.11	1.25	0.50				
13.57	0.148	0.000	0.017	0.017	1.35	0.09	1.26	0.43	0.155	0.010	0.042	
14.67	0.145	0.000	0.016	0.016								
15.52	0.147	0.000	0.015	0.015								
16.63	0.158	0.000	0.015	0.015	1.35	0.15	1.20	0.39				
17.00					1.33	0.17	1.16	0.36				
18.48	0.139	0.000	0.014	0.014	1.31	0.12	1.19	0.38				
19.00												
20.75	0.102	0.000	0.012	0.012	1.30	0.11	1.19	0.33				
21.00		0.000	0.011	0.011								
22.00		0.000	0.011	0.011	1.35	0.15	1.20	0.38				
23.83	0.073	0.000	0.010	0.010	1.28	0.15	1.13	0.36				

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.28		0.00	0.00			
1.47	22.2	0.00	0.00			
2.55		0.00	0.00			
3.55		0.00	0.00			
4.25	22.8	0.00	0.00			
5.40		0.01	0.24			
6.40		0.20	5.40			
7.40	23.9	0.24	18.36			
8.78		0.18	35.46			
9.88		0.64	71.72			
10.95	24.4	1.27	148.59			
11.15		0.70	158.70			
12.47		0.45	207.00			
13.57	27.8	0.90	252.00			
14.67		0.80	307.40			
15.52		0.85	349.75			
16.63	30.0	0.70	401.00	51.82		16.00
17.00		0.19	416.40			
18.46		0.04	426.96			
19.00	26.1	0.01	430.20			
20.75		0.00	430.80			
21.00		0.00	430.80			
22.00	23.9	0.00	430.80			
23.83		0.00	430.80			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 7-24-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.058	0.000	0.011	0.011	1.27	0.15	1.13	0.31				
1.13	0.056	0.000	0.011	0.011	1.35	0.16	1.19	0.32				
2.65	0.042	0.000	0.011	0.011	1.34	0.16	1.17	0.36				
3.68		0.000	0.011	0.011	1.33	0.20	1.12	0.31				
4.68	0.032	0.000	0.011	0.011	1.27	0.20	1.06	0.31				
5.68	0.026	0.000	0.012	0.012	1.26	0.14	1.12	0.30				
6.50	0.019	0.000	0.014	0.014	1.31	0.13	1.18	0.32				
7.80	0.014	0.000	0.016	0.016	1.25	0.18	1.07	0.32				
8.95	0.016	0.000	0.021	0.021	1.31	0.26	1.05	0.38				
9.88	0.016	0.000	0.026	0.026					0.043	0.012	0.015	
10.15	0.033	0.000	0.027	0.027	1.31	0.26	1.04	0.32				
11.22	0.043	0.000	0.028	0.028	1.19	0.19	0.99	0.35				
12.23	0.069	0.000	0.027	0.027	1.35	0.24	1.11	0.41				
13.22	0.142	0.000	0.026	0.026	1.33	0.21	1.12	0.43	0.208	0.013	0.034	
14.55	0.214	0.000	0.024	0.024	1.33	0.26	1.07	0.43				
15.80	0.255	0.000	0.021	0.021								
16.87	0.276	0.000	0.020	0.020								
17.00												
18.00												
19.00												
20.00												
21.00												
22.00												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.13	23.3	0.00	0.00			
2.65		0.00	0.00			
3.68		0.00	0.00			
4.68	22.2	0.00	0.00			
5.68		0.01	0.41			
6.50		0.08	3.00			
7.80	23.3	0.27	18.36			
8.95		0.14	29.58			
9.88		0.30	45.90			
10.15	26.1	0.80	55.20			
11.22		1.30	112.90			
12.23		1.08	189.12			
13.22	30.6	1.15	253.75			
14.55		1.10	344.10			
15.80		0.83	413.64			
16.87	30.0	0.53	451.16			
17.00		0.42	455.40			
18.00		0.13	460.60			
19.00	23.9	0.01	488.40			
20.00		0.00	489.00			
21.00		0.00	489.00			
22.00	23.3	0.00	489.00			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 7-22-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000	1.55	0.45	1.10	0.00				
1.30	0.000	0.000	0.000	0.000	1.54	0.50	1.04	9.82				
2.30	0.000	0.004	0.053	0.058	4.22	0.50	3.71	9.73				
3.30	0.000											
4.30	0.000	0.199	0.048	0.247	4.94	0.47	4.47	9.60				
5.30	0.000	0.197	0.049	0.246	4.96	0.50	4.46	9.63				
6.30	0.000	0.168	0.073	0.241	4.97	0.48	4.48	9.64				
7.27	0.027	0.018	0.203	0.221	4.69	0.50	4.19	9.66				
8.52	0.296	0.000	0.168	0.168	4.52	0.56	3.96	9.66	0.337	0.151	0.188	
9.35	0.444	0.000	0.145	0.145	4.40	0.51	3.88	9.66				
10.47	0.647	0.000	0.118	0.118	4.19	0.52	3.67	9.69				
11.00	0.718	0.000	0.108	0.108	4.16	0.64	3.51	9.72				
12.07	0.770	0.000	0.096	0.096	4.01	0.56	3.45	9.81				
13.22	0.799	0.000	0.084	0.084	3.86	0.50	3.36	9.86	1.058	0.018	0.193	
14.00	0.805	0.000	0.081	0.081	3.78	0.54	3.24	9.87				
15.93	0.789	0.000	0.064	0.064	3.69	0.50	3.19	9.95				
16.93	0.629	0.000	0.064	0.064	3.56	0.51	3.05	9.96				
17.27	0.613	0.000	0.048	0.048	3.15	0.60	2.55	8.45				
18.35	0.495	0.000	0.036	0.036	2.78	0.37	2.41	6.71				
19.38	0.396	0.000	0.028	0.028	2.49	0.26	2.23	5.67				
20.53	0.299	0.000	0.021	0.021	2.22	0.25	1.97	4.61				
21.70	0.226	0.000	0.017	0.017	2.00	0.24	1.76	3.85				
22.00												
23.57	0.139	0.000	0.012	0.012	1.80	0.23	1.56	2.80				

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	22.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	21.7	0.00	0.00			
5.30		0.03	0.54			
6.30		0.20	5.40			
7.27	23.3	0.45	21.00			
8.52		0.72	63.12			
9.35		1.00	105.00			
10.47	28.9	1.21	177.88			
11.00		0.98	216.60			
12.07		1.35	280.80			
13.22	31.1	1.01	369.53			
14.00		1.15	417.00			
15.93		0.86	534.16			
16.93	30.6	0.22	549.92	65.70	16.00	
17.27		0.12	552.72			
18.35		0.59	570.39			
19.38	27.2	0.01	593.63			
20.53		0.00	594.00			
21.70		0.00	594.00			
22.00	23.3	0.00	594.00			
23.57		0.00	594.00			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 7-23-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.57	0.104	0.000	0.011	0.011	1.70	0.21	1.49	2.33				
1.82	0.064	0.000	0.011	0.011	1.64	0.18	1.46	1.88				
2.82	0.051	0.000	0.010	0.010	1.52	0.18	1.35	1.58				
3.82	0.035	0.000	0.009	0.009	1.53	0.19	1.34	1.29				
4.48	0.020	0.000	0.010	0.010	1.46	0.16	1.30	1.16				
5.67	0.015	0.000	0.007	0.007	1.43	0.19	1.24	0.93				
6.67	0.013	0.000	0.010	0.010	1.40	0.20	1.20	0.91				
7.73	0.023	0.000	0.012	0.012	1.29	0.19	1.10	0.81				
8.98	0.030	0.000	0.014	0.014	1.24	0.20	1.04	0.67	0.029	0.013	0.039	
9.08	0.033	0.000	0.014	0.014	1.22	0.16	1.06	0.48				
10.22	0.086	0.000	0.014	0.014	1.20	0.19	1.01	0.47				
11.50	0.108	0.000	0.015	0.015	1.07	0.17	0.90	0.37				
12.83	0.097	0.000	0.014	0.014	1.09	0.18	0.92	0.30				
13.88	0.103	0.000	0.012	0.012	1.06	0.16	0.90	0.29	0.147	0.010	0.055	
14.97	0.105	0.000	0.011	0.011	1.15	0.24	0.91	0.29				
15.83	0.110	0.000	0.011	0.011	1.19	0.25	0.94	0.28				
16.93	0.118	0.000	0.011	0.011	1.24	0.25	0.98	0.24				
17.00	0.118	0.000	0.011	0.011	1.11	0.20	0.90	0.22				
18.73	0.103	0.000	0.011	0.011	1.11	0.17	0.94	0.21				
19.08	0.097	0.000	0.012	0.012	1.13	0.19	0.94	0.21				
20.82	0.077	0.000	0.011	0.011	1.10	0.20	0.90	0.23				
21.97	0.075	0.000	0.010	0.010	1.10	0.19	0.91	0.21				
22.25	0.073	0.000	0.009	0.009	1.13	0.23	0.90	0.29				
23.90	0.054	0.000	0.009	0.009	1.09	0.18	0.91	0.29				

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.57		0.00	0.00			
1.82	22.2	0.00	0.00			
2.82		0.00	0.00			
3.82		0.00	0.00			
4.48	22.8	0.00	0.00			
5.67		0.01	0.40			
6.67		0.20	8.60			
7.73	23.9	0.24	23.16			
8.98		0.18	37.62			
9.08		0.64	41.00			
10.22	24.4	1.27	92.71			
11.50		0.70	173.40			
12.83		0.45	216.90			
13.88	27.8	0.90	269.10			
14.97		0.80	321.80			
15.83		0.85	365.90			
16.93	30.0	0.70	413.60	65.70		16.00
17.00		0.19	416.40			
18.73		0.04	429.56			
19.08	26.1	0.01	430.25			
20.82		0.00	430.80			
21.97		0.00	430.80			
22.25	23.9	0.00	430.80			
23.90		0.00	430.80			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 7-24-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.12	0.054	0.000	0.009	0.009	1.14	0.19	0.94	0.27				
1.43	0.041	0.000	0.006	0.006	1.11	0.21	0.90	0.23				
2.93	0.029	0.000	0.007	0.007	1.19	0.25	0.94	0.24				
3.00		0.000	0.007	0.007	1.14	0.20	0.94	0.23				
4.93	0.021	0.000	0.007	0.007	1.15	0.21	0.94	0.21				
5.95	0.017	0.000	0.010	0.010	1.16	0.25	0.91	0.23				
6.98	0.015	0.000	0.012	0.012	1.10	0.19	0.91	0.22				
7.12	0.011	0.000	0.011	0.011	1.10	0.21	0.89	0.22				
8.20	0.009	0.000	0.014	0.014								
9.22	0.016	0.000	0.021	0.021					0.045	0.019	0.032	
10.38	0.033	0.000	0.024	0.024	1.10	0.25	0.85	0.22				
11.58	0.043	0.000	0.024	0.024	1.11	0.25	0.86	0.26				
12.47	0.071	0.000	0.021	0.021	1.09	0.25	0.84	0.28				
13.70	0.140	0.000	0.019	0.019	1.16	0.24	0.92	0.31	0.205	0.013	0.013	
14.80	0.176	0.000	0.016	0.016	1.14	0.24	0.90	0.30				
15.98	0.208	0.000	0.016	0.016	1.16	0.25	0.91	0.37				
16.98	0.222	0.000	0.014	0.014								
17.00												
18.00												
19.00												
20.00												
21.00												
22.00												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.12		0.00	0.00			
1.43	23.3	0.00	0.00			
2.93		0.00	0.00			
3.00		0.00	0.00			
4.93	22.2	0.00	0.00			
5.95		0.01	0.57			
6.98		0.08	5.32			
7.12	23.3	0.27	7.29			
8.20		0.14	23.28			
9.22		0.30	33.90			
10.38	26.1	0.80	66.40			
11.58		1.30	141.50			
12.47		1.08	204.24			
13.70	30.6	1.15	287.10			
14.80		1.10	360.60			
15.98		0.83	422.77			
16.98	30.0	0.53	454.87			
17.00		0.42	455.40			
18.00		0.13	480.60			
19.00	23.9	0.01	488.40			
20.00		0.00	489.00			
21.00		0.00	489.00			
22.00	23.3	0.00	489.00			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 7-22-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000	1.56	0.60	0.97	0.00				
1.47	0.000	0.000	0.000	0.000	1.60	0.61	1.00	9.11				
2.47	0.000	0.014	0.150	0.164	4.10	0.62	3.48	9.00				
3.47	0.000											
4.47	0.000	0.588	0.144	0.733	4.70	0.60	4.11	8.90				
5.47	0.000	0.578	0.154	0.732	4.70	0.55	4.15	8.89				
6.47	0.000	0.545	0.173	0.719	4.74	0.56	4.19	8.83				
7.43	0.000	0.427	0.272	0.698	4.55	0.61	3.94	8.88				
8.05	0.000	0.304	0.360	0.664	4.44	0.55	3.89	8.77				
9.53	0.011	0.065	0.529	0.595	4.26	0.59	3.66	8.81	0.166	0.435	0.143	
10.07	0.050	0.011	0.554	0.565	4.22	0.60	3.62	8.84				
11.22	0.258	0.000	0.470	0.470	4.16	0.77	3.39	8.84				
12.32	0.492	0.000	0.364	0.364	3.93	0.58	3.34	8.92				
13.47	0.736	0.000	0.250	0.250	3.77	0.61	3.17	8.96	0.997	0.085	0.179	
14.10	0.890	0.000	0.203	0.203	3.61	0.59	3.02	8.92				
15.05	1.023	0.000	0.150	0.150	3.56	0.61	2.96	8.92				
16.27	0.967	0.000	0.113	0.113	3.32	0.60	2.72	8.44				
17.55	0.755	0.000	0.077	0.077	2.83	0.57	2.26	6.90				
18.63	0.607	0.000	0.059	0.059	2.55	0.50	2.05	5.74				
19.73	0.482	0.000	0.043	0.043	2.24	0.38	1.86	4.73				
20.92	0.369	0.000	0.034	0.034	2.01	0.33	1.68	3.92				
21.92	0.295	0.000	0.029	0.029	1.58	0.25	1.32	3.30				
22.00			0.107									
23.82	0.182	0.000	0.019	0.019	1.56	0.15	1.41	2.47				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	21.7	0.00	0.00			
5.47		0.03	0.84			
6.47		0.20	7.40			
7.43	23.3	0.45	25.50			
8.05		0.72	42.96			
9.53		1.00	116.00			
10.07	28.9	1.21	148.84			
11.22		0.98	229.34			
12.32		1.35	301.05			
13.47	31.1	1.01	384.68			
14.10		1.15	423.90			
15.05		0.86	488.58			
16.27	30.6	0.59	547.04	58.05	16.00	
17.55		0.22	580.26			
18.63		0.12	590.76			
19.73	27.2	0.01	593.84			
20.92		0.00	594.00			
21.92		0.00	594.00			
22.00	23.3	0.00	594.00			
23.82		0.00	594.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 7-23-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.140	0.000	1.086	1.086	1.48	0.11	1.38	2.02				
1.98	0.103	0.000	0.014	0.014								
2.08	0.101	0.000	0.013	0.013	1.45	0.10	1.34	1.64				
3.07	0.075	0.000	0.011	0.011	1.36	0.11	1.25	1.47				
4.10	0.056	0.000	0.011	0.011	1.28	0.10	1.18	1.19				
5.93	0.028	0.000	0.010	0.010	1.34	0.14	1.20	1.01				
6.92	0.021	0.000	0.013	0.013	1.24	0.08	1.16	0.87				
7.83	0.029	0.000	0.013	0.013	1.23	0.11	1.13	0.77				
8.15	0.029	0.000	0.015	0.015	1.17	0.09	1.08	0.60	0.033	0.018	0.039	
9.37	0.039	0.000	0.014	0.014	1.07	0.11	0.96	0.51				
10.50	0.093	0.000	0.013	0.013	1.05	0.14	0.91	0.43				
11.82	0.098	0.000	0.011	0.011	1.04	0.10	0.94	0.39				
12.00					1.04	0.10	0.94	0.36				
13.15	0.097	0.000	0.011	0.011	1.06	0.09	0.97	0.32	0.098	0.009	0.070	
14.13	0.097	0.000	0.010	0.010	1.06	0.18	0.88	0.29				
15.15	0.097	0.000	0.010	0.010	1.14	0.21	0.93	0.26				
16.00	0.102	0.000	0.010	0.010	1.15	0.22	0.93	0.26				
17.58	0.102	0.000	0.010	0.010	1.04	0.12	0.92	0.25				
18.00		0.000	0.010	0.010								
19.55	0.085	0.000	0.007	0.007	1.05	0.14	0.91	0.28				
20.00												
21.00		0.000	0.007	0.007	1.03	0.19	0.84	0.26				
22.48	0.058	0.000	0.006	0.006								
23.00	0.056	0.000	0.006	0.006	1.10	0.15	0.95	0.27				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.98	22.2	0.00	0.00			
2.08		0.00	0.00			
3.07		0.00	0.00			
4.10	22.8	0.00	0.00			
5.93		0.01	0.56			
6.92		0.20	11.60			
7.83	23.9	0.24	24.60			
8.15		0.18	28.62			
9.37		0.64	51.88			
10.50	24.4	1.27	114.30			
11.82		0.70	186.70			
12.00		0.45	194.40			
13.15	27.8	0.90	229.50			
14.13		0.80	281.80			
15.15		0.85	331.05			
16.00	30.0	0.70	374.40	58.05		16.00
17.58		0.19	423.05			
18.00		0.04	427.80			
19.55	26.1	0.01	430.53			
20.00		0.00	430.80			
21.00		0.00	430.80			
22.48	23.9	0.00	430.80			
23.00		0.00	430.80			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 7-24-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.45	0.043	0.000	0.005	0.005	1.05	0.25	0.81	0.22				
1.78	0.033	0.000	0.005	0.005	1.04	0.23	0.82	0.27				
2.98	0.025	0.000	0.007	0.007	1.02	0.23	0.79	0.27				
3.97	0.025	0.000	0.007	0.007								
4.95	0.025	0.000	0.007	0.007	1.10	0.22	0.88	0.21				
5.18	0.021	0.000	0.009	0.009	1.10	0.25	0.85	0.30				
6.20	0.016	0.000	0.006	0.006	0.99	0.26	0.73	0.23				
7.35	0.011	0.000	0.009	0.009	1.07	0.30	0.77	0.27				
8.45	0.009	0.000	0.011	0.011								
9.47	0.016	0.000	0.016	0.016					0.038	0.015	0.020	
10.72	0.033	0.000	0.019	0.019	1.03	0.31	0.72	0.26				
11.73	0.045	0.000	0.019	0.019	1.03	0.34	0.69	0.31				
12.73	0.086	0.000	0.018	0.018								
13.78	0.140	0.000	0.016	0.016	1.12	0.31	0.81	0.29	0.197	0.012	0.050	
14.07	0.152	0.000	0.016	0.016	1.11	0.32	0.79	0.35				
15.28	0.193	0.000	0.014	0.014	1.11	0.36	0.75	0.34				
16.30	0.214	0.000	0.013	0.013								
17.37	0.229	0.000	0.013	0.013								
18.00												
19.00												
20.00												
21.00												
22.00												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.45		0.00	0.00			
1.78	23.3	0.00	0.00			
2.98		0.00	0.00			
3.97		0.00	0.00			
4.95	22.2	0.00	0.00			
5.18		0.01	0.11			
6.20		0.08	1.56			
7.35	23.3	0.27	11.07			
8.45		0.14	25.38			
9.47		0.30	38.40			
10.72	26.1	0.80	82.40			
11.73		1.30	153.20			
12.73		1.08	221.52			
13.78	30.6	1.15	292.85			
14.07		1.10	312.20			
15.28		0.83	387.91			
16.30	30.0	0.53	433.14			
17.37		0.42	464.64			
18.00		0.13	480.60			
19.00	23.9	0.01	488.40			
20.00		0.00	489.00			
21.00		0.00	489.00			
22.00	23.3	0.00	489.00			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 7-22-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000	1.36	0.33	1.03	0.00				
1.97	0.000	0.000	0.000	0.000	1.40	0.37	1.04	*				
2.97	0.000	0.001	0.021	0.022	2.01	0.41	1.60	*				
3.97	0.000	0.090	0.021	0.111	2.11	0.30	1.81	*				
4.97	0.000	0.089	0.021	0.110	2.14	0.38	1.76	*				
5.97	0.000	0.088	0.022	0.110	2.12	0.40	1.72	*				
6.97	0.000	0.053	0.053	0.107	2.12	0.39	1.72	9.90				
7.75	0.021	0.009	0.088	0.096	2.06	0.32	1.74	9.89				
8.33	0.058	0.000	0.092	0.092	2.06	0.35	1.71	9.91				
9.05	0.111	0.000	0.083	0.083	2.09	0.50	1.59	9.72				
10.30	0.302	0.000	0.063	0.063	1.96	0.44	1.51	9.63				
11.45	0.403	0.000	0.052	0.052	2.06	0.55	1.52	9.53				
12.63	0.484	0.000	0.043	0.043	1.99	0.43	1.56	9.33	0.494	0.010	0.052	
13.63	0.514	0.000	0.040	0.040	1.95	0.48	1.47	9.37				
14.38	0.531	0.000	0.034	0.034	1.90	0.44	1.46	9.25				
15.40	0.535	0.000	0.032	0.032	1.90	0.45	1.44	9.21				
16.52	0.482	0.000	0.030	0.030	1.81	0.44	1.37	8.22				
17.78	0.363	0.000	0.021	0.021	1.68	0.39	1.28	6.57				
18.88	0.300	0.000	0.016	0.016	1.50	0.32	1.18	5.51				
19.92	0.240	0.000	0.012	0.012	1.45	0.27	1.18	4.61				
20.98	0.184	0.000	0.011	0.011				3.72				
21.98	0.131	0.000	0.007	0.007	1.35	0.26	1.09	3.25				
22.38	0.128	0.000	0.006	0.006	1.32	0.24	1.08	2.97				
23.95	0.086	0.000	0.005	0.005	1.25	0.19	1.05	2.69				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	22.2	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	21.7	0.00	0.00			
5.97		0.03	1.74			
6.97		0.20	13.40			
7.75	23.3	0.45	34.05			
8.33		0.72	55.20			
9.05		1.00	87.00			
10.30	28.9	1.21	165.78			
11.45		0.98	243.06			
12.63		1.35	326.70			
13.63	31.1	1.01	394.78			
14.38		1.15	443.45			
15.40		0.86	506.64			
16.52	30.6	0.59	555.89	62.58	16.00	
17.78		0.22	583.34			
18.88		0.12	592.56			
19.92	27.2	0.01	593.95			
20.98		0.00	594.00			
21.98		0.00	594.00			
22.38	23.3	0.00	594.00			
23.95		0.00	594.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

* Off-Scale

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 7-23-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.90	0.068	0.000	0.004	0.004	1.23	0.18	1.06	2.29				
1.32	0.060	0.000	0.004	0.004	1.24	0.23	1.02	1.91				
2.30	0.043	0.000	0.004	0.004	1.22	0.24	0.98	1.49				
3.30	0.033	0.000	0.003	0.003	1.23	0.25	0.99	1.27				
4.30	0.024	0.000	0.004	0.004	1.23	0.28	0.95	1.06				
5.00	0.016	0.000	0.003	0.003	1.22	0.28	0.94	0.85				
6.15	0.011	0.000	0.006	0.006	1.15	0.25	0.89	0.71				
7.15	0.011	0.000	0.010	0.010	1.16	0.26	0.90	0.65				
8.48	0.018	0.000	0.010	0.010	1.17	0.28	0.89	0.50				
9.65	0.030	0.000	0.009	0.009	1.19	0.30	0.88	0.38	0.027	0.003	0.032	
10.88	0.063	0.000	0.009	0.009	1.16	0.28	0.88	0.36				
11.92	0.061	0.000	0.007	0.007	1.16	0.30	0.86	0.34				
12.13	0.059	0.000	0.007	0.007	1.13	0.30	0.83	0.22				
13.38	0.064	0.000	0.007	0.007	1.16	0.30	0.86	0.21	0.072	0.003	0.028	
14.38	0.064	0.000	0.006	0.006	1.19	0.42	0.77	0.21				
15.38	0.067	0.000	0.006	0.006								
16.37	0.076	0.000	0.006	0.006	1.26	0.46	0.79	0.16				
17.67	0.075	0.000	0.007	0.007	1.21	0.38	0.83	0.19				
18.00	0.073	0.000	0.007	0.007	1.15	0.37	0.78	0.17				
19.70	0.054	0.000	0.006	0.006	1.15	0.43	0.72	0.20				
20.07	0.051	0.000	0.006	0.006	1.14	0.39	0.75	0.20				
21.00					1.22	0.40	0.82	0.23				
22.98	0.037	0.000	0.005	0.005	1.20	0.42	0.79	0.21				
23.27	0.037	0.000	0.004	0.004	1.23	0.43	0.80	0.18				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.90		0.00	0.00			
1.32	22.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	22.8	0.00	0.00			
5.00		0.01	0.00			
6.15		0.20	2.40			
7.15	23.9	0.24	14.76			
8.48		0.18	32.22			
9.65		0.64	62.76			
10.88	24.4	1.27	143.51			
11.92		0.70	190.90			
12.13		0.45	198.00			
13.38	27.8	0.90	242.10			
14.38		0.80	293.80			
15.38		0.85	342.95			
16.37	30.0	0.70	389.80	62.58		16.00
17.67		0.19	424.00			
18.00		0.04	427.80			
19.70	26.1	0.01	430.62			
20.07		0.00	430.80			
21.00		0.00	430.80			
22.98	23.9	0.00	430.80			
23.27		0.00	430.80			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 7-24-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.029	0.000	0.004	0.004								
1.92	0.021	0.000	0.004	0.004	1.19	0.43	0.76	0.13				
2.38		0.000	0.004	0.004	1.20	0.42	0.79	0.14				
3.00		0.000	0.005	0.005	1.16	0.43	0.73	0.13				
4.43	0.017	0.000	0.005	0.005	1.21	0.49	0.72	0.18				
5.43	0.012	0.000	0.005	0.005	1.27	0.46	0.81	0.17				
6.50	0.011	0.000	0.007	0.007	1.21	0.44	0.77	0.18				
7.60	0.008	0.000	0.009	0.009	1.26	0.46	0.80	0.20				
8.70	0.007	0.000	0.012	0.012								
9.80	0.021	0.000	0.018	0.018	1.16	0.51	0.65	0.20	0.044	0.018	0.011	
10.95	0.029	0.000	0.019	0.019	1.06	0.51	0.55	0.19				
11.97	0.045	0.000	0.019	0.019								
12.97	0.086	0.000	0.017	0.017	1.13	0.50	0.63	0.22				
13.00	0.092	0.000	0.013	0.013	1.19	0.52	0.67	0.26	0.195	0.007	0.039	
14.28	0.139	0.000	0.014	0.014	1.27	0.50	0.77	0.28				
15.57	0.171	0.000	0.012	0.012	1.20	0.44	0.76	0.27				
16.55	0.184	0.000	0.011	0.011								
17.67	0.193	0.000	0.011	0.011								
18.00												
19.00												
20.00												
21.00												
22.00												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.92	23.3	0.00	0.00			
2.38		0.00	0.00			
3.00		0.00	0.00			
4.43	22.2	0.00	0.00			
5.43		0.01	0.26			
6.50		0.08	3.00			
7.60	23.3	0.27	15.12			
8.70		0.14	27.48			
9.80		0.30	44.40			
10.95	26.1	0.80	93.60			
11.97		1.30	171.40			
12.97		1.08	236.64			
13.00	30.6	1.15	238.80			
14.28		1.10	326.50			
15.57		0.83	402.02			
16.55	30.0	0.53	441.09			
17.67		0.42	472.20			
18.00		0.13	480.60			
19.00	23.9	0.01	486.40			
20.00		0.00	489.00			
21.00		0.00	489.00			
22.00	23.3	0.00	489.00			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 7-28-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000	1.20	0.57	0.63	0.00				
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.833	0.225	1.058								
3.63	0.000	0.814	0.224	1.037	*	0.17						
4.63	0.000	0.802	0.232	1.034	*	0.50		9.05				
5.63	0.000	0.785	0.238	1.024	*	0.50		8.92				
6.63	0.000	0.733	0.273	1.005	*	0.50		8.85				
7.63	0.000	0.545	0.433	0.979	*	0.55		*				
8.63	0.000	0.193	0.691	0.883	*	0.53		8.42				
9.63	0.095	0.009	0.708	0.717	*	0.44		7.40	0.189	0.720	0.153	
10.63	0.342	0.000	0.522	0.522	4.85	0.40	4.45	6.42				
11.63	0.599	0.000	0.342	0.342	4.15	0.38	3.77	5.62				
12.63	0.834	0.000	0.209	0.209	3.57	0.35	3.22	4.95				
13.63	0.909	0.000	0.141	0.141	3.12	0.33	2.79	4.38				
14.63	0.865	0.000	0.108	0.108	2.68	0.28	2.40	3.90	0.942	0.019	0.094	
15.63	0.776	0.000	0.086	0.086	2.38	0.28	2.10	3.38				
16.63	0.676	0.000	0.068	0.068	2.10	0.25	1.85	2.96				
17.63	0.569	0.000	0.053	0.053	1.88	0.25	1.63	2.58				
18.63	0.472	0.000	0.043	0.043	1.68	0.25	1.43	2.23				
19.63	0.385	0.000	0.033	0.033	1.58	0.18	1.40	1.92				
20.63	0.302	0.000	0.027	0.027	1.53	0.18	1.35	1.66				
21.63	0.240	0.000	0.022	0.022	1.39	0.18	1.21	1.40				
22.63	0.193	0.000	0.019	0.019	1.28	0.18	1.10	1.20				
23.63	0.151	0.000	0.016	0.016	1.21	0.15	1.06	1.03				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	20.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.9	0.00	0.00			
5.63		0.03	1.14			
6.63		0.16	7.88			
7.63	21.1	0.43	27.74			
8.63		0.71	64.18	51.82	8.00	
9.63		0.97	116.66			
10.63	27.2	1.84	207.92			
11.63		1.29	297.42			
12.63		1.16	369.88			
13.63	30.0	1.30	444.80			
14.63		1.15	517.10			
15.63		0.94	578.12			
16.63	31.7	0.63	622.74			
17.63		0.37	650.66			
18.63		0.13	663.74			
19.63	27.2	0.02	667.36			
20.63		0.00	667.80			
21.63		0.00	667.80			
22.63	23.3	0.00	667.80			
23.63		0.00	667.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

** Data Suspect and Deleted

* Measurement Off-Scale

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 7-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.117	0.000	0.014	0.014	1.12	0.13	0.99	0.92				
1.63	0.090	0.000	0.011	0.011	1.05	0.10	0.95	0.76				
2.63	0.068	0.000	0.011	0.011	1.00	0.16	0.84	0.65				
3.63	0.053	0.000	0.010	0.010	1.00	0.10	0.90	0.52				
4.63	0.039	0.000	0.007	0.007	0.98	0.14	0.84	0.53				
5.63	0.028	0.000	0.007	0.007	0.97	0.15	0.82	0.40				
6.63	0.020	0.000	0.009	0.009	0.85	0.13	0.72	0.38				
7.63	0.021	0.000	0.011	0.011	0.82	0.12	0.70	0.27				
8.63	0.045	0.000	0.013	0.013	0.75	0.10	0.65	0.25				
9.63	0.083	0.000	0.016	0.016	0.64	0.13	0.51	0.26	0.088	0.017	0.030	
10.63	0.128	0.000	0.017	0.017	0.70	0.14	0.56	0.31				
11.63	0.165	0.000	0.017	0.017	0.62	0.09	0.53	0.34				
12.63	0.187	0.000	0.019	0.019	0.65	0.15	0.50	0.31				
13.63	0.214	0.000	0.019	0.019	0.73	0.08	0.65	0.40				
14.63	0.235	0.000	0.020	0.020	0.70	0.10	0.60	0.38	0.322	0.012	0.012	
15.63	0.245	0.000	0.018	0.018	0.68	0.10	0.58	0.42				
16.63	0.238	0.000	0.018	0.018	0.70	0.13	0.57	0.44				
17.63	0.227	0.000	0.016	0.016	0.72	0.13	0.59	0.48				
18.63	0.212	0.000	0.016	0.016	0.73	0.10	0.63	0.43				
19.63	0.190	0.000	0.012	0.012	0.76	0.12	0.64	0.44				
20.63	0.167	0.000	0.011	0.011	0.78	0.13	0.65	0.44				
21.63	0.148	0.000	0.011	0.011	0.90	0.10	0.80	0.43				
22.63	0.130	0.000	0.011	0.011	0.78	0.11	0.67	0.42				
23.63	0.116	0.000	0.011	0.011	0.90	0.14	0.76	0.46				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.0	0.00	0.00			
5.63		0.04	1.52			
6.63		0.18	9.24			
7.63	21.1	0.42	29.16			
8.63		0.69	64.62	51.82		8.00
9.63		0.94	115.52			
10.63	28.3	1.13	179.14			
11.63		0.87	237.06			
12.63		0.90	290.40			
13.63	31.1	0.90	344.40			
14.63		1.09	405.62			
15.63		0.83	461.14			
16.63	29.4	0.60	502.20			
17.63		0.33	527.94			
18.63		0.11	539.38			
19.63	27.2	0.01	542.18			
20.63		0.01	542.78			
21.63		0.00	543.00			
22.63	22.2	0.00	543.00			
23.63		0.00	543.00			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 7-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.101	0.000	0.011	0.011	0.89	0.12	0.77	0.44				
1.63	0.087	0.000	0.010	0.010	0.95	0.10	0.85	0.44				
2.63	0.077	0.000	0.010	0.010								
3.63	0.066	0.000	0.010	0.010								
4.63	0.057	0.000	0.010	0.010								
5.63	0.050	0.000	0.011	0.011								
6.63	0.043	0.000	0.011	0.011								
7.63	0.043	0.000	0.016	0.016								
8.63	0.069	0.000	0.020	0.020					0.075	0.010	0.029	
9.63	0.117	0.000	0.021	0.021	1.05	0.15	0.90	0.48				
10.63	0.156	0.000	0.021	0.021	1.05	0.16	0.89	0.51				
11.63	0.188	0.000	0.021	0.021	0.86	0.14	0.72	0.55				
12.63	0.194	0.000	0.021	0.021	1.07	0.10	0.97	0.57				
13.63	0.194	0.000	0.020	0.020	0.96	0.15	0.81	0.57				
14.63	0.205	0.000	0.018	0.018	0.91	0.15	0.76	0.56	0.223	0.007		*
15.63												
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	22.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.6	0.00	0.00			
5.63		0.01	0.58			
6.63		0.15	6.30			
7.63	22.2	0.41	25.18			
8.63		0.68	60.04			
9.63		0.90	109.20			
10.63	29.4	0.83	160.54			
11.63		0.93	214.14			
12.63		0.35	247.90			
13.63	29.4	0.84	287.52			
14.63		0.74	334.12			
15.63		0.79	380.42			
16.63	28.9	0.38	412.24			
17.63		0.20	428.20			
18.63		0.06	434.88			
19.63	25.0	0.01	436.58			
20.63		0.00	436.80			
21.63		0.00	436.80			
22.63	22.2	0.00	436.80			
23.63		0.00	436.80			

% POSSIBLE MINUTES OF SUNSHINE 59

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* Data Suspect and Discarded

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 7-28-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000	1.25	0.55	0.70	0.00				
1.80	0.000	0.000	0.000	0.000	1.22	0.55	0.67	0.00				
2.80	0.000	0.198	0.053	0.251	4.93	0.60	4.33	*				
3.80	0.000	0.196	0.053	0.249	4.85	0.62	4.23	9.92				
4.80	0.000	0.198	0.053	0.251	4.81	0.57	4.24	*				
5.80	0.000	0.193	0.053	0.246	4.89	0.57	4.32	*				
6.80	0.000	0.148	0.094	0.242	4.63	0.57	4.06	*				
7.80	0.062	0.011	0.218	0.229	4.03	0.50	3.53	*				
8.80	0.251	0.000	0.166	0.166	3.65	0.58	3.07	8.45				
9.80	0.412	0.000	0.116	0.116	3.34	0.47	2.87	7.20	0.376	0.101	0.107	
10.80	0.506	0.000	0.086	0.086	2.70	0.56	2.14	6.00				
11.80	0.516	0.000	0.067	0.067	2.39	0.55	1.84	5.05				
12.80	0.506	0.000	0.056	0.056	2.13	0.53	1.60	4.30				
13.80	0.485	0.000	0.046	0.046	1.90	0.50	1.40	3.70				
14.80	0.451	0.000	0.039	0.039	1.87	0.50	1.37	3.16	0.567	0.014	0.045	
15.80	0.402	0.000	0.032	0.032	1.65	0.51	1.14	2.68				
16.80	0.347	0.000	0.029	0.029	1.50	0.47	1.03	2.29				
17.80	0.288	0.000	0.022	0.022	1.47	0.47	1.00	1.90				
18.80	0.232	0.000	0.019	0.019	1.42	0.47	0.95	1.64				
19.80	0.181	0.000	0.014	0.014	1.33	0.45	0.88	1.35				
20.80	0.139	0.000	0.011	0.011	1.33	0.45	0.88	1.15				
21.80	0.110	0.000	0.010	0.010	1.28	0.44	0.84	0.98				
22.80	0.086	0.000	0.010	0.010	1.24	0.43	0.81	0.80				
23.80	0.064	0.000	0.007	0.007	1.22	0.43	0.79	0.66				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	20.6	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	18.9	0.00	0.00			
5.80		0.03	1.44			
6.80		0.16	9.48			
7.80	21.1	0.43	32.04	65.70	7.67	
8.80		0.71	71.28			
9.80		0.97	126.36			
10.80	27.2	1.04	187.92			
11.80		1.29	262.32			
12.80		1.16	333.48			
13.80	30.0	1.30	409.80			
14.80		1.15	480.60			
15.80		0.94	539.52			
16.80	31.7	0.63	581.04			
17.80		0.37	606.36			
18.80		0.13	617.04			
19.80	27.2	0.02	619.56			
20.80		0.00	619.80			
21.80		0.00	619.80			
22.80	23.3	0.00	619.80			
23.80		0.00	619.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* Measurement Off-Scale

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 5 7-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.048	0.000	0.005	0.005	1.22	0.40	0.82	0.52				
1.80	0.034	0.000	0.004	0.004	1.08	0.38	0.70	0.47				
2.80	0.024	0.000	0.003	0.003	1.08	0.41	0.67	0.36				
3.80	0.017	0.000	0.003	0.003	1.15	0.38	0.77	0.30				
4.80	0.010	0.000	0.002	0.002	1.07	0.35	0.72	0.22				
5.80	0.007	0.000	0.003	0.003	1.05	0.29	0.76	0.20				
6.80	0.005	0.000	0.004	0.004	0.98	0.23	0.75	0.13				
7.80	0.011	0.000	0.006	0.006	0.87	0.20	0.67	0.17				
8.80	0.034	0.000	0.010	0.010	0.85	0.23	0.62	0.15				
9.80	0.065	0.000	0.012	0.012	0.85	0.21	0.64	0.15	0.065	0.013	0.012	
10.80	0.098	0.000	0.014	0.014	0.84	0.23	0.61	0.17				
11.80	0.121	0.000	0.013	0.013	0.83	0.22	0.61	0.15				
12.80	0.141	0.000	0.014	0.014	0.78	0.24	0.54	0.20				
13.80	0.160	0.000	0.014	0.014	0.80	0.23	0.57	0.20				
14.80	0.176	0.000	0.013	0.013	0.82	0.22	0.60	0.22	*	0.016	0.009	
15.80	0.181	0.000	0.014	0.014	0.84	0.22	0.62	0.24				
16.80	0.178	0.000	0.014	0.014	0.87	0.20	0.67	0.24				
17.80	0.171	0.000	0.015	0.015	0.85	0.24	0.61	0.25				
18.80	0.160	0.000	0.013	0.013	0.90	0.25	0.65	0.31				
19.80	0.145	0.000	0.011	0.011	0.89	0.25	0.64	0.28				
20.80	0.130	0.000	0.009	0.009	0.93	0.29	0.64	0.29				
21.80	0.117	0.000	0.007	0.007	0.95	0.33	0.62	0.33				
22.80	0.107	0.000	0.006	0.006	0.98	0.28	0.70	0.26				
23.80	0.094	0.000	0.005	0.005	0.98	0.28	0.70	0.28				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.0	0.00	0.00			
5.80		0.04	1.92			
6.80		0.18	11.04			
7.80	21.1	0.42	33.36	65.70		7.67
8.80		0.69	71.52			
9.80		0.94	124.92			
10.80	28.3	1.13	190.44			
11.80		0.87	245.76			
12.80		0.90	299.40			
13.80	31.1	0.90	353.40			
14.80		1.09	416.52			
15.80		0.83	469.44			
16.80	29.4	0.60	508.20			
17.80		0.53	551.24			
18.80		0.11	540.48			
19.80	27.2	0.01	542.28			
20.80		0.00	542.40			
21.80		0.00	542.40			
22.80	22.2	0.00	542.40			
23.80		0.00	542.40			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* Data Suspect and Discarded

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 7-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.083	0.000	0.005	0.005	0.95	0.28	0.67	0.30				
1.80	0.073	0.000	0.004	0.004	1.04	0.28	0.76	0.26				
2.80	0.064	0.000	0.004	0.004								
3.80	0.056	0.000	0.005	0.005								
4.80	0.048	0.000	0.005	0.005								
5.80	0.043	0.000	0.006	0.006								
6.80	0.033	0.000	0.009	0.009								
7.80	0.035	0.000	0.011	0.011								
8.80	0.058	0.000	0.014	0.014	0.95	0.36	0.59	0.28	0.095	0.014	0.019	
9.80	0.096	0.000	0.015	0.015	0.99	0.35	0.64	0.32				
10.80	0.126	0.000	0.016	0.016	1.15	0.34	0.81	0.54				
11.80	0.147	0.000	0.015	0.015	0.96	0.32	0.64	0.33				
12.80	0.150	0.000	0.015	0.015	1.13	0.35	0.73	0.33				
13.80	0.157	0.000	0.014	0.014	1.04	0.32	0.72	0.34				
14.80	0.163	0.000	0.015	0.015	0.99	0.33	0.66	0.38	0.220	0.014	*	
15.80												
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	22.8	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.6	0.00	0.00			
5.80		0.01	0.48			
6.80		0.15	7.80			
7.80	22.2	0.41	29.28			
8.80		0.68	66.84			
9.80		0.90	118.20			
10.80	29.4	0.83	168.84			
11.80		0.93	223.44			
12.80		0.35	251.40			
13.80	29.4	0.84	295.92			
14.80		0.74	341.52			
15.80		0.79	388.32			
16.80	28.9	0.38	416.04			
17.80		0.20	430.20			
18.80		0.06	435.48			
19.80	25.0	0.01	436.68			
20.80		0.00	436.80			
21.80		0.00	436.80			
22.80	22.2	0.00	436.80			

% POSSIBLE MINUTES OF SUNSHINE 59

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* Data Suspect and Discarded

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 7-28-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000	0.67	0.13	0.54	0.00				
1.97	0.000	0.000	0.000	0.000	0.50	0.08	0.42	9.30				
2.97	0.000	0.603	0.179	0.782	3.72	0.06	3.66	9.20				
3.97	0.000	0.591	0.180	0.771	3.90	0.13	3.77	9.10				
4.97	0.000	0.583	0.182	0.765	4.05	0.10	3.95	8.93				
5.97	0.000	0.571	0.184	0.755	4.15	0.10	4.05	*				
6.97	0.000	0.528	0.212	0.740	3.90	0.07	3.83	9.10				
7.97	0.000	0.413	0.299	0.712	3.65	0.09	3.56	9.00				
8.97	0.000	0.214	0.460	0.674								
9.97	0.019	0.056	0.513	0.569	3.03	0.08	2.95	7.73	0.085	0.518	0.136	
10.97	0.127	0.003	0.438	0.442	2.43	0.10	2.33	6.70				
11.97	0.258	0.000	0.326	0.326	2.08	0.06	2.02	5.75				
12.97	0.398	0.000	0.225	0.225	1.85	0.05	1.80	4.90				
13.97	0.511	0.000	0.141	0.141	1.55	0.10	1.45	4.18				
14.97	0.571	0.000	0.094	0.094	1.31	0.10	1.21	3.60	0.650	0.040	0.070	
15.97	0.550	0.000	0.065	0.065	1.15	0.05	1.10	3.00				
16.97	0.489	0.000	0.051	0.051	1.07	0.09	0.98	2.55				
17.97	0.406	0.000	0.040	0.040	0.92	0.09	0.83	2.18				
18.97	0.326	0.000	0.029	0.029	0.86	0.07	0.79	1.82				
19.97	0.254	0.000	0.021	0.021	0.87	0.05	0.82	1.50				
20.97	0.201	0.000	0.016	0.016	0.80	0.10	0.70	1.27				
21.97	0.159	0.000	0.013	0.013	0.78	0.08	0.70	1.08				
22.97	0.126	0.000	0.012	0.012	0.73	0.10	0.63	0.95				
23.97	0.098	0.000	0.011	0.011	0.59	0.12	0.47	0.78				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	20.6	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	18.9	0.00	0.00			
5.97		0.03	1.74			
6.97		0.16	11.08			
7.97	21.1	0.43	36.34			
8.97		0.71	78.38	58.05	8.00	
9.97		0.97	136.06			
10.97	27.2	1.04	198.32			
11.97		1.29	275.22			
12.97		1.16	345.08			
13.97	30.0	1.30	422.80			
14.97		1.15	492.10			
15.97		0.94	548.92			
16.97	31.7	0.63	567.34			
17.97		0.37	610.06			
18.97		0.13	618.34			
19.97	27.2	0.02	619.76			
20.97		0.00	619.80			
21.97		0.00	619.80			
22.97	23.3	0.00	619.80			
23.97		0.00	619.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* Data Suspect and Deleted

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 7-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.074	0.000	0.009	0.009	0.65	0.13	0.52	0.66				
1.97	0.056	0.000	0.006	0.006	0.66	0.10	0.56	0.52				
2.97	0.043	0.000	0.006	0.006	0.56	0.08	0.48	0.48				
3.97	0.032	0.000	0.005	0.005	0.56	0.08	0.48	0.38				
4.97	0.023	0.000	0.004	0.004	0.60	0.08	0.52	0.31				
5.97	0.017	0.000	0.005	0.005	0.53	0.08	0.45	0.30				
6.97	0.011	0.000	0.006	0.006	0.45	0.06	0.39	0.23				
7.97	0.020	0.000	0.009	0.009	0.42	0.10	0.32	0.20				
8.97	0.059	0.000	0.010	0.010	0.40	0.13	0.27	0.15				
9.97	0.066	0.000	0.011	0.011	0.29	0.08	0.21	0.16	0.057	0.013	0.017	
10.97	0.101	0.000	0.012	0.012	0.33	0.09	0.24	0.19				
11.97	0.121	0.000	0.012	0.012	0.31	0.09	0.22	0.22				
12.97	0.139	0.000	0.013	0.013	0.35	0.07	0.28	0.26				
13.97	0.163	0.000	0.013	0.013	0.38	0.07	0.31	0.26				
14.97	0.178	0.000	0.013	0.013	0.38	0.10	0.28	0.28	0.303	0.022	0.052	
15.97	0.182	0.000	0.013	0.013	0.40	0.11	0.29	0.30				
16.97	0.180	0.000	0.013	0.013	0.35	0.10	0.25	0.33				
17.97	0.169	0.000	0.013	0.013	0.41	0.13	0.28	0.30				
18.97	0.152	0.000	0.012	0.012	0.47	0.11	0.36	0.30				
19.97	0.134	0.000	0.010	0.010	0.57	0.10	0.47	0.35				
20.97	0.118	0.000	0.007	0.007	0.63	0.07	0.56	0.31				
21.97	0.107	0.000	0.007	0.007	0.60	0.10	0.50	0.33				
22.97	0.096	0.000	0.006	0.006	0.63	0.12	0.51	0.32				
23.97	0.086	0.000	0.005	0.005	0.64	0.10	0.54	0.38				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	20.0	0.00	0.00			
5.97		0.03	1.74			
6.97		0.18	12.24			
7.97	21.1	0.42	36.96			
8.97		0.69	77.82	58.05		8.00
9.97		0.94	133.72			
10.97	28.3	1.13	201.14			
11.97		0.87	253.86			
12.97		0.90	307.80			
13.97	31.1	0.90	361.80			
14.97		1.09	426.82			
15.97		0.83	477.14			
16.97	29.4	0.60	513.60			
17.97		0.33	533.94			
18.97		0.11	540.98			
19.97	27.2	0.01	541.78			
20.97		0.00	541.80			
21.97		0.00	541.80			
22.97	22.2	0.00	541.80			
23.97		0.00	541.80			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 7-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.074	0.000	0.005	0.005	0.67	0.13	0.54	0.32				
1.97	0.065	0.000	0.005	0.005	0.68	0.13	0.55	0.34				
2.97	0.058	0.000	0.005	0.005								
3.97	0.051	0.000	0.005	0.005								
4.97	0.044	0.000	0.005	0.005								
5.97	0.040	0.000	0.006	0.006								
6.97	0.032	0.000	0.010	0.010								
7.97	0.040	0.000	0.011	0.011								
8.97	0.066	0.000	0.013	0.013	0.73	0.12	0.61	0.33	0.070	0.018	0.006	
9.97	0.104	0.000	0.014	0.014	0.67	0.11	0.56	0.38				
10.97	0.133	0.000	0.015	0.015	0.61	0.07	0.54	0.34				
11.97	0.151	0.000	0.014	0.014	0.60	0.15	0.45	0.36				
12.97	0.150	0.000	0.014	0.014	0.64	0.15	0.49	0.43				
13.97	0.163	0.000	0.014	0.014	0.63	0.13	0.50	0.41				
14.97	0.161	0.000	0.013	0.013	0.66	0.10	0.56	0.43	0.214	0.010	*	
15.97												
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	22.8	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	20.6	0.00	0.00			
5.97		0.01	0.58			
6.97		0.15	9.30			
7.97	22.2	0.41	33.38			
8.97		0.68	73.64			
9.97		0.90	127.20			
10.97	29.4	0.83	177.14			
11.97		0.93	232.74			
12.97		0.35	254.90			
13.97	29.4	0.84	304.52			
14.97		0.74	348.92			
15.97		0.79	396.22			
16.97	28.9	0.38	419.84			
17.97		0.20	432.20			
18.97		0.06	436.08			
19.97	25.0	0.01	436.78			
20.97		0.00	436.80			
21.97		0.00	436.80			
22.97	22.2	0.00	436.80			

% POSSIBLE MINUTES OF SUNSHINE 59

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* Data Suspect and Discarded

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 7-28-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.000	0.000	0.000	1.35	0.89	0.46	0.00				
2.47	0.000	0.000	0.027	0.027	1.22	0.99	0.23	*				
3.47	0.000	0.089	0.026	0.114	1.90	0.86	1.04	*				
4.47	0.000	0.089	0.024	0.112	2.05	0.90	1.15	*				
5.47	0.000	0.088	0.024	0.111	2.07	0.90	1.17	*				
6.47	0.000	0.086	0.024	0.109	2.05	0.90	1.15	*				
7.47	0.000	0.053	0.053	0.107	2.16	0.86	1.30	*				
8.47	0.033	0.005	0.082	0.088	1.78	0.92	0.86	8.78				
9.47	0.107	0.000	0.070	0.070	1.75	0.90	0.85	7.53	0.127	0.083	0.036	
10.47	0.186	0.000	0.049	0.049	1.65	0.77	0.88	6.10				
11.47	0.249	0.000	0.034	0.034	1.56	0.84	0.72	5.10				
12.47	0.276	0.000	0.027	0.027	1.45	0.78	0.67	4.25				
13.47	0.278	0.000	0.021	0.021	1.38	0.75	0.63	3.50				
14.47	0.267	0.000	0.018	0.018	1.33	0.75	0.58	2.95	0.334	0.012	0.025	
15.47	0.244	0.000	0.015	0.015	1.28	0.71	0.57	2.48				
16.47	0.214	0.000	0.013	0.013	1.25	0.65	0.60	2.02				
17.47	0.181	0.000	0.011	0.011	1.18	0.66	0.52	1.75				
18.47	0.148	0.000	0.010	0.010	1.15	0.62	0.53	1.46				
19.47	0.117	0.000	0.006	0.006	1.14	0.58	0.56	1.22				
20.47	0.091	0.000	0.006	0.006	1.13	0.55	0.58	1.00				
21.47	0.069	0.000	0.005	0.005	1.08	0.55	0.53	0.89				
22.47	0.053	0.000	0.003	0.003	1.05	0.53	0.52	0.70				
23.47	0.041	0.000	0.003	0.003	1.04	0.47	0.57	0.60				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	20.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.9	0.00	0.00			
5.47		0.03	0.84			
6.47		0.16	6.28			
7.47	21.1	0.43	23.44	62.58	7.50	
8.47		0.71	57.08			
9.47		0.97	106.96			
10.47	27.2	1.04	167.12			
11.47		1.29	236.52			
12.47		1.16	310.28			
13.47	30.0	1.30	383.80			
14.47		1.15	457.60			
15.47		0.94	520.12			
16.47	31.7	0.63	568.44			
17.47		0.37	598.96			
18.47		0.13	614.44			
19.47	27.2	0.02	614.16			
20.47		0.00	614.80			
21.47		0.00	614.80			
22.47	25.3	0.00	614.80			
23.47		0.00	614.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* Measurement Off-Scale

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 7-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.030	0.000	0.002	0.002	0.99	0.44	0.55	0.50				
1.47	0.021	0.000	0.002	0.002	0.98	0.44	0.54	0.40				
2.47	0.015	0.000	0.002	0.002	1.02	0.43	0.59	0.32				
3.47	0.010	0.000	0.002	0.002	1.00	0.45	0.55	0.25				
4.47	0.006	0.000	0.002	0.002	1.03	0.38	0.65	0.23				
5.47	0.005	0.000	0.002	0.002	1.00	0.40	0.60	0.20				
6.47	0.003	0.000	0.002	0.002	1.00	0.28	0.72	0.14				
7.47	0.004	0.000	0.003	0.003	0.87	0.33	0.54	0.16				
8.47	0.015	0.000	0.004	0.004	0.87	0.29	0.58	0.11				
9.47	0.035	0.000	0.006	0.006	0.83	0.33	0.50	0.14	0.046	0.008	0.016	
10.47	0.062	0.000	0.009	0.009	0.85	0.32	0.53	0.15				
11.47	0.086	0.000	0.009	0.009	0.84	0.34	0.50	0.14				
12.47	0.103	0.000	0.010	0.010	0.85	0.36	0.49	0.12				
13.47	0.121	0.000	0.010	0.010	0.82	0.38	0.44	0.17				
14.47	0.138	0.000	0.010	0.010	0.88	0.36	0.52	0.20	0.281	0.015	0.009	
15.47	0.147	0.000	0.010	0.010	0.93	0.40	0.53	0.25				
16.47	0.150	0.000	0.010	0.010	0.95	0.37	0.58	0.26				
17.47	0.144	0.000	0.010	0.010	0.94	0.41	0.53	0.23				
18.47	0.139	0.000	0.009	0.009	0.93	0.45	0.48	0.22				
19.47	0.127	0.000	0.009	0.009	1.02	0.45	0.57	0.25				
20.47	0.116	0.000	0.005	0.005	1.10	0.45	0.65	0.27				
21.47	0.105	0.000	0.004	0.004	1.04	0.46	0.58	0.30				
22.47	0.096	0.000	0.004	0.004	1.08	0.49	0.59	0.26				
23.47	0.086	0.000	0.003	0.003	1.12	0.48	0.64	0.29				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.0	0.00	0.00			
5.47		0.03	0.84			
6.47		0.18	6.84			
7.47	21.1	0.42	24.36	62.58		7.50
8.47		0.69	57.12			
9.47		0.94	105.52			
10.47	28.3	1.13	167.24			
11.47		0.87	227.76			
12.47		0.90	280.80			
13.47	31.1	0.90	334.80			
14.47		1.09	394.12			
15.47		0.83	452.24			
16.47	29.4	0.60	495.60			
17.47		0.33	524.04			
18.47		0.11	537.68			
19.47	27.2	0.01	541.48			
20.47		0.00	541.80			
21.47		0.00	541.80			
22.47	22.2	0.00	541.80			
23.47		0.00	541.80			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 7-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.079	0.000	0.003	0.003	1.00	0.52	0.48	0.29				
1.47	0.071	0.000	0.004	0.004	1.07	0.52	0.55	0.23				
2.47	0.064	0.000	0.003	0.003	1.15	0.52	0.63	0.29				
3.47	0.057	0.000	0.003	0.003								
4.47	0.051	0.000	0.004	0.004								
5.47	0.044	0.000	0.003	0.003								
6.47	0.040	0.000	0.004	0.004								
7.47	0.036	0.000	0.005	0.005								
8.47	0.044	0.000	0.009	0.009					0.065	0.021	0.034	
9.47	0.069	0.000	0.011	0.011	1.22	0.54	0.68	0.30				
10.47	0.098	0.000	0.011	0.011	1.26	0.64	0.62	0.34				
11.47	0.117	0.000	0.011	0.011	1.10	0.58	0.52	0.26				
12.47	0.129	0.000	0.011	0.011	1.18	0.53	0.65	0.32				
13.47	0.128	0.000	0.011	0.011	1.21	0.60	0.61	0.32				
14.47	0.143	0.000	0.011	0.011	1.15	0.58	0.57	0.32	0.202	0.011	0.042	
15.47												
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.6	0.00	0.00			
5.47		0.01	0.28			
6.47		0.15	4.80			
7.47	22.2	0.41	21.08			
8.47		0.68	53.24			
9.47		0.90	100.20			
10.47	29.4	0.83	152.24			
11.47		0.93	204.84			
12.47		0.35	248.40			
13.47	29.4	0.84	279.12			
14.47		0.74	326.72			
15.47		0.90	375.60			
16.47	28.9	0.38	415.04			
17.47		0.20	432.80			
18.47		0.06	440.88			
19.47	25.0	0.01	443.08			
20.47		0.00	443.40			
21.47		0.00	443.40			
22.47	22.2	0.00	443.40			

% POSSIBLE MINUTES OF SUNSHINE 59

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8- 4-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000	0.51	0.14	0.37	0.00				
1.63	0.000	0.000	0.000	0.000	0.49	0.11	0.38	0.02				
2.63	0.000	0.692	0.235	0.927	0.44	0.21	0.23	0.02				
3.63	0.000	0.787	0.214	1.001	4.30	0.14	4.15	9.05				
4.63	0.000	0.770	0.225	0.995	*	0.12		9.03				
5.63	0.000	0.756	0.230	0.986	7.41	0.12	7.29	8.52				
6.63	0.000	0.703	0.274	0.976	7.47	0.09	7.38	8.62				
7.63	0.000	0.503	0.467	0.970	6.95	0.11	6.85	8.62				
8.63	0.003	0.137	0.723	0.860	6.95	0.13	6.82	8.82				
9.63	0.171	0.003	0.651	0.655	6.16	0.15	6.00	8.60				
10.63	0.449	0.002	0.478	0.480	*	0.14		8.18	0.497	0.457	0.298	
11.63	0.814	0.001	0.304	0.305	4.44	0.11	4.33	7.70				
12.63	*	0.001	0.190	0.191	3.77	0.10	3.68	7.07				
13.63	1.145	0.001	0.141	0.142	3.22	0.13	3.09	6.68				
14.63	*	0.001	0.113	0.114	2.89	0.14	2.74	6.29	1.150	0.022	0.172	
15.63	1.040	0.001	0.089	0.090	2.59	0.10	2.49	5.81				
16.63	0.936	0.001	0.075	0.076	2.34	0.12	2.22	4.91				
17.63	0.822	0.001	0.064	0.065	2.16	0.11	2.05	4.51				
18.63	0.728	0.001	0.051	0.052	2.06	0.06	2.00	4.10				
19.63	0.642	0.001	0.042	0.043	1.89	0.13	1.76	3.83				
20.63	0.561	0.001	0.035	0.036	1.77	0.14	1.64	3.45				
21.63	0.489	0.000	0.032	0.032	1.72	0.11	1.61	3.24				
22.63	0.423	0.000	0.028	0.028	1.66	0.13	1.54	2.99				
23.63	0.358	0.000	0.025	0.025	1.49	0.14	1.35	2.71				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	22.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	22.2	0.00	0.00			
5.63		0.02	0.76			
6.63		0.12	5.76			
7.63	22.8	0.35	21.70	29.73	7.67	
8.63		0.75	57.90			
9.63		0.99	112.02			
10.63	30.0	1.06	174.08			
11.63		1.30	246.80			
12.63		1.30	324.80			
13.63	32.2	0.90	387.60			
14.63		0.92	442.36			
15.63		0.97	499.46			
16.63	32.2	0.67	546.26			
17.63		0.37	575.06			
18.63		0.11	587.38			
19.63	27.2	0.00	589.80			
20.63		0.00	589.80			
21.63		0.00	589.80			
22.63	24.4	0.00	589.80			
23.63		0.00	589.80			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

* Instrument off-scale.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8- 5-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.306	0.000	0.021	0.021	1.41	0.14	1.27	2.44				
1.63	0.262	0.000	0.020	0.020	1.27	0.14	1.14	2.26				
2.63	0.222	0.000	0.018	0.018	1.34	0.13	1.20	2.06				
3.63	0.187	0.000	0.018	0.018	1.28	0.15	1.13	1.88				
4.63	0.155	0.000	0.018	0.018	1.18	0.15	1.03	1.74				
5.63	0.128	0.000	0.018	0.018	1.19	0.13	1.07	1.59				
6.63	0.102	0.000	0.024	0.024	1.06	0.09	0.97	1.43				
7.63	0.098	0.000	0.028	0.028	0.96	0.14	0.82	1.30				
8.63	0.140	0.000	0.029	0.029	1.00	0.14	0.86	1.22	0.157	0.014	0.025	
9.63	0.198	0.000	0.031	0.031	0.90	0.11	0.80	1.25				
10.63	0.257	0.000	0.031	0.031	0.94	0.12	0.83	1.25				
11.63	0.309	0.000	0.030	0.030	0.94	0.13	0.81	1.23				
12.63	0.354	0.000	0.029	0.029	0.92	0.12	0.80	1.31				
13.63	0.388	0.000	0.027	0.027	0.89	0.13	0.76	1.34				
14.63	0.407	0.000	0.027	0.027	0.90	0.13	0.77	1.35	0.352	0.010	0.034	
15.63	0.409	0.000	0.026	0.026	0.89	0.11	0.78	1.34				
16.63	0.410	0.000	0.029	0.029	0.85	0.10	0.75	1.40				
17.63	0.385	0.000	0.022	0.022	0.84	0.14	0.70	1.33				
18.63	0.367	0.000	0.021	0.021	0.86	0.14	0.72	1.39				
19.63	0.350	0.000	0.019	0.019	0.89	0.15	0.74	1.36				
20.63	0.333	0.000	0.016	0.016	0.89	0.10	0.79	1.42				
21.63	0.320	0.000	0.016	0.016	0.86	0.13	0.72	1.36				
22.63	0.306	0.000	0.015	0.015	0.88	0.14	0.74	1.37				
23.63	0.292	0.000	0.014	0.014	0.94	0.11	0.83	1.33				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	23.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	22.2	0.00	0.00			
5.63		0.03	1.14			
6.63		0.18	8.64			
7.63	23.9	0.45	29.70	29.73		7.67
8.63		0.72	66.96			
9.63		1.00	120.80			
10.63	29.4	1.13	185.74			
11.63		1.11	252.78			
12.63		1.28	325.84			
13.63	31.1	0.88	387.44			
14.63		0.99	444.42			
15.63		0.76	495.08			
16.63	30.6	0.72	539.16			
17.63		0.42	570.96			
18.63		0.14	585.52			
19.63	27.8	0.01	588.98			
20.63		0.00	589.20			
21.63		0.00	589.20			
22.63	25.0	0.00	589.20			
23.63		0.00	589.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8- 6-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.278	0.000	0.014	0.014	0.88	0.14	0.75	1.33				
1.63	0.266	0.000	0.014	0.014	0.96	0.13	0.83	1.34				
2.63	0.251	0.000	0.014	0.014	0.89	0.12	0.77	1.34				
3.63	0.232	0.000	0.013	0.013	0.96	0.15	0.81	1.35				
4.63	0.210	0.000	0.013	0.013	0.94	0.15	0.79	1.35				
5.63	0.189	0.000	0.014	0.014								
6.63	0.167	0.000	0.016	0.016	0.96	0.24	0.72	1.39				
7.63	0.151	0.000	0.021	0.021	0.81	0.13	0.67	1.31				
8.63	0.150	0.000	0.022	0.022	0.94	0.15	0.80	1.29	0.140	0.011	0.038	
9.63	0.149	0.000	0.022	0.022	0.91	0.22	0.69	1.31				
10.63	0.153	0.000	0.024	0.024	0.89	0.15	0.75	1.27				
11.63	0.161	0.000	0.026	0.026	0.89	0.20	0.69	1.29				
12.63	0.202	0.000	0.027	0.027	0.90	0.17	0.73	1.28				
13.63	0.231	0.000	0.027	0.027	0.89	0.15	0.75	1.35				
14.63	0.251	0.000	0.026	0.026	0.91	0.17	0.74	1.32				
15.63	0.243	0.000	0.025	0.025	0.85	0.24	0.61	1.35	0.265	0.011	0.029	
16.63					0.89	0.22	0.67	1.32				
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	23.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	21.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.16	6.08			
7.63	23.3	0.26	19.48			
8.63		0.30	36.60			
9.63		0.30	54.60			
10.63	25.6	0.54	81.72			
11.63		0.44	110.32			
12.63		1.23	166.74			
13.63	28.3	0.99	231.42			
14.63		0.64	277.52			
15.63		0.45	308.70			
16.63	23.3	0.33	331.14			
17.63		0.13	343.34			
18.63		0.06	348.48			
19.63	23.3	0.00	349.60			
20.63		0.00	349.80			
21.63		0.00	349.80			
22.63	21.7	0.00	349.80			

% POSSIBLE MINUTES OF SUNSHINE 42

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 8- 4-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000	1.29	0.92	0.37	0.00				
1.80	0.000	0.000	0.000	0.000	1.31	0.87	0.44	0.00				
2.80	0.000	0.198	0.050	0.248	1.21	0.85	0.36	0.00				
3.80	0.000	0.196	0.051	0.247	1.44	0.87	0.58	*				
4.80	0.000	0.193	0.052	0.245	4.15	0.83	3.32	*				
5.80	0.000	0.190	0.053	0.244	5.19	0.78	4.40	9.84				
6.80	0.000	0.140	0.102	0.242	5.19	0.79	4.40	*				
7.80	0.068	0.003	0.218	0.221	5.13	0.78	4.35	9.84				
8.80	0.311	0.002	0.167	0.169	5.02	0.80	4.22	9.94				
9.80	0.534	0.002	0.150	0.152	4.39	0.86	3.53	9.80				
10.80	0.642	0.001	0.089	0.090	3.86	0.78	3.07	8.90	0.620	0.033	0.164	
11.80	0.684	0.001	0.072	0.073	3.22	0.68	2.54	8.28				
12.80	0.690	0.001	0.063	0.064	2.77	0.65	2.13	7.59				
13.80	0.684	0.001	0.053	0.055	2.46	0.51	1.95	6.88				
14.80	0.647	0.001	0.049	0.050	2.25	0.48	1.78	6.47	0.768	0.017	0.077	
15.80	0.594	0.001	0.040	0.041	2.11	0.41	1.69	5.96				
16.80	0.535	0.001	0.033	0.034	2.07	0.46	1.60	5.07				
17.80	0.477	0.001	0.030	0.031	1.84	0.38	1.46	4.61				
18.80	0.418	0.001	0.025	0.026	1.68	0.29	1.39	4.23				
19.80	0.364	0.001	0.019	0.020	1.57	0.28	1.29	3.85				
20.80	0.312	0.001	0.016	0.017	1.52	0.23	1.30	3.52				
21.80	0.268	0.000	0.014	0.014	1.37	0.28	1.09	3.15				
22.80	0.227	0.000	0.012	0.012	1.28	0.28	1.00	2.83				
23.80	0.192	0.000	0.011	0.011	1.40	0.29	1.11	2.62				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	22.8	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	22.2	0.00	0.00			
5.80		0.02	0.96			
6.80		0.12	6.96			
7.80	22.8	0.55	25.20	30.02	7.67	
8.80		0.75	65.40			
9.80		0.99	121.92			
10.80	30.0	1.06	184.68			
11.80		1.30	259.80			
12.80		1.30	337.80			
13.80	32.2	0.90	396.60			
14.80		0.92	451.56			
15.80		0.97	509.16			
16.80	32.2	0.97	567.36			
17.80		0.37	596.76			
18.80		0.11	606.48			
19.80	27.2	0.00	607.80			
20.80		0.00	607.80			
21.80		0.00	607.80			
22.80	24.4	0.00	607.80			
23.80		0.00	607.80			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 92.0 CENT

*Instrument off-scale.

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8- 5-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.163	0.000	0.010	0.010	1.26	0.24	1.02	2.39				
1.80	0.136	0.000	0.009	0.009	1.23	0.32	0.91	2.16				
2.80	0.112	0.000	0.009	0.009	1.13	0.24	0.89	1.93				
3.80	0.092	0.000	0.010	0.010	1.16	0.28	0.88	1.71				
4.80	0.075	0.000	0.011	0.011	1.16	0.27	0.89	1.62				
5.80	0.060	0.000	0.012	0.012	1.27	0.32	0.94	1.46				
6.80	0.046	0.000	0.016	0.016	1.16	0.32	0.84	1.26				
7.80	0.058	0.000	0.018	0.018	1.10	0.28	0.82	1.10				
8.80	0.098	0.000	0.019	0.019	0.97	0.33	0.64	1.08	0.107	0.012	0.017	
9.80	0.151	0.000	0.019	0.019	1.02	0.29	0.73	1.11				
10.80	0.195	0.000	0.019	0.019	0.99	0.33	0.66	1.10				
11.80	0.236	0.000	0.019	0.019	1.01	0.31	0.69	1.07				
12.80	0.270	0.000	0.019	0.019	0.90	0.34	0.56	1.10				
13.80	0.296	0.000	0.018	0.018	1.00	0.34	0.66	1.21				
14.80	0.311	0.000	0.018	0.018	0.95	0.33	0.62	1.17	0.259	0.012	0.025	
15.80	0.313	0.000	0.017	0.017	0.91	0.33	0.58	1.18				
16.80	0.309	0.000	0.017	0.017	1.00	0.31	0.68	1.17				
17.80	0.298	0.000	0.017	0.017	0.95	0.32	0.63	1.17				
18.80	0.285	0.000	0.014	0.014	0.94	0.33	0.61	1.20				
19.80	0.270	0.000	0.011	0.011	0.96	0.36	0.60	1.22				
20.80	0.258	0.000	0.010	0.010								
21.80	0.247	0.000	0.010	0.010	0.94	0.37	0.58	1.18				
22.80	0.240	0.000	0.009	0.009	1.02	0.33	0.69	1.18				
23.80	0.230	0.000	0.007	0.007	0.96	0.33	0.64	1.15				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	23.3	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	22.2	0.00	0.00			
5.80		0.02	0.96			
6.80		0.12	6.96			
7.80	23.9	0.55	25.20	30.02		7.67
8.80		0.75	65.40			
9.80		0.99	124.92			
10.80	29.4	1.06	184.68			
11.80		1.30	259.80			
12.80		1.30	337.80			
13.80	31.1	0.90	396.60			
14.80		0.92	451.56			
15.80		0.97	509.16			
16.80	30.6	0.67	552.96			
17.80		0.37	578.76			
18.80		0.11	588.48			
19.80	27.8	0.00	589.80			
20.80		0.00	589.80			
21.80		0.00	589.80			
22.80	25.0	0.00	589.80			
23.80		0.00	589.80			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 91.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8- 6-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.218	0.000	0.007	0.007	1.01	0.37	0.64	1.19				
1.80	0.208	0.000	0.006	0.006	0.90	0.37	0.53	1.14				
2.80	0.193	0.000	0.006	0.006	0.94	0.36	0.58	1.13				
3.80	0.178	0.000	0.006	0.006	0.99	0.40	0.59	1.23				
4.80	0.161	0.000	0.006	0.006	1.00	0.38	0.62	1.17				
5.80	0.144	0.000	0.006	0.006	1.10	0.38	0.72	1.14				
6.80	0.128	0.000	0.001	0.001	0.89	0.42	0.47	1.06				
7.80	0.115	0.000	0.012	0.012	1.00	0.43	0.57	1.15				
8.80	0.112	0.000	0.015	0.015	0.84	0.43	0.41	1.13	0.106	0.008	0.020	
9.80	0.110	0.000	0.015	0.015	0.88	0.41	0.47	1.14				
10.80	0.118	0.000	0.016	0.016	0.91	0.38	0.53	1.10				
11.80	0.128	0.000	0.016	0.016	1.00	0.42	0.57	1.13				
12.80	0.170	0.000	0.017	0.017	0.95	0.34	0.62	1.14				
13.80	0.191	0.000	0.018	0.018	0.94	0.38	0.56	1.15				
14.80	0.199	0.000	0.017	0.017	0.98	0.39	0.59	1.18				
15.80	0.195	0.000	0.016	0.016	0.99	0.36	0.63	1.21	0.221	0.016	0.012	
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	23.9	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	21.7	0.00	0.00			
5.80		0.00	0.00			
6.80		0.16	7.68			
7.80	23.3	0.26	22.08			
8.80		0.30	39.60			
9.80		0.30	57.60			
10.80	25.6	0.54	87.12			
11.80		0.44	114.72			
12.80		1.23	179.04			
13.80	28.3	0.99	241.32			
14.80		0.64	285.92			
15.80		0.45	313.20			
16.80	23.3	0.33	334.44			
17.80		0.13	342.64			
18.80		0.06	349.08			
19.80	25.3	0.00	349.80			
20.80		0.00	349.80			
21.80		0.00	349.80			
22.80	21.7	0.00	349.80			
23.80		0.00	349.80			

% POSSIBLE MINUTES OF SUNSHINE 42

RDU AIRPORT MAXIMUM TEMPERATURE 84.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8- 4-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000	0.56	0.11	0.44	0.00				
1.97	0.000	0.000	0.000	0.000	0.63	0.10	0.54	0.00				
2.97	0.000	0.580	0.147	0.726	0.61	0.11	0.50	0.00				
3.97	0.000	0.572	0.150	0.722	0.73	0.11	0.62	9.33				
4.97	0.000	0.557	0.154	0.711	3.52	0.09	3.43	9.14				
5.97	0.000	0.545	0.159	0.705	4.50	0.11	4.40	9.03				
6.97	0.000	0.499	0.199	0.698	4.39	0.13	4.25	9.03				
7.97	0.000	0.414	0.326	0.740	4.39	0.08	4.31	9.03				
8.97	0.003	0.140	0.462	0.602	4.10	0.11	3.99	8.92				
9.97	0.054	0.016	0.497	0.513	3.88	0.17	3.71	8.55				
10.97	0.191	0.001	0.431	0.432	3.36	0.20	3.16	7.83	0.265	0.417	0.175	
11.97	0.388	0.001	0.293	0.294	2.89	0.16	2.72	7.30				
12.97	0.583	0.001	0.205	0.206	2.45	0.16	2.30	6.56				
13.97	0.770	0.001	0.130	0.132	2.22	0.14	2.07	5.91				
14.97	0.818	0.001	0.091	0.092	2.05	0.19	1.86	5.51	0.915	0.034	0.083	
15.97	0.818	0.001	0.080	0.081	1.80	0.19	1.60	4.97				
16.97	0.785	0.001	0.056	0.057	1.64	0.18	1.46	4.22				
17.97	0.708	0.001	0.046	0.047	1.59	0.15	1.44	3.86				
18.97	0.625	0.001	0.033	0.034	1.42	0.11	1.31	3.36				
19.97	0.546	0.001	0.028	0.029	1.30	0.15	1.14	3.08				
20.97	0.473	0.000	0.022	0.022	1.19	0.14	1.05	2.75				
21.97	0.412	0.000	0.021	0.021	1.18	0.13	1.05	2.46				
22.97	0.354	0.000	0.017	0.017	1.11	0.14	0.97	2.27				
23.97	0.299	0.000	0.014	0.014	1.05	0.15	0.90	2.01				

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	22.8	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	22.2	0.00	0.00			
5.97		0.02	1.16			
6.97		0.12	8.16			
7.97	22.8	0.35	28.70			
8.97		0.75	72.90	30.02	8.00	
9.97		0.99	131.82			
10.97	30.0	1.06	195.28			
11.97		1.30	272.80			
12.97		1.30	350.80			
13.97	32.2	0.90	405.60			
14.97		0.92	460.76			
15.97		0.97	518.86			
16.97	32.2	0.67	559.66			
17.97		0.37	582.46			
18.97		0.11	589.58			
19.97	27.2	0.00	589.80			
20.97		0.00	589.80			
21.97		0.00	589.80			
22.97	24.4	0.00	589.80			
23.97		0.00	589.80			

RTI OUTDOOR SMOG CHAMBER STUDY

CHAMBER NUMBER 3
DAY 2 OF 3 8- 5-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.257	0.000	0.012	0.012	1.05	0.15	0.90	1.89				
1.97	0.219	0.000	0.012	0.012	0.97	0.15	0.82	1.62				
2.97	0.187	0.000	0.011	0.011	0.92	0.15	0.77	1.52				
3.97	0.161	0.000	0.011	0.011	0.88	0.15	0.74	1.42				
4.97	0.133	0.000	0.011	0.011	0.83	0.12	0.71	1.28				
5.97	0.112	0.000	0.018	0.018	0.77	0.15	0.62	1.15				
6.97	0.091	0.000	0.019	0.019	0.81	0.14	0.67	1.00				
7.97	0.080	0.000	0.019	0.019	0.71	0.13	0.58	0.91				
8.97	0.118	0.000	0.019	0.019	0.84	0.14	0.70	0.81	0.108	0.012	0.031	
9.97	0.161	0.000	0.018	0.018	0.69	0.10	0.58	0.86				
10.97	0.204	0.000	0.017	0.017	0.67	0.16	0.51	0.82				
11.97	0.235	0.000	0.016	0.016	0.64	0.14	0.51	0.88				
12.97	0.268	0.000	0.016	0.016	0.65	0.14	0.51	0.94				
13.97	0.289	0.000	0.015	0.015	0.70	0.09	0.61	0.88				
14.97	0.299	0.000	0.016	0.016	0.65	0.10	0.55	0.92	0.278	0.011	0.032	
15.97	0.299	0.000	0.015	0.015	0.71	0.09	0.62	0.96				
16.97	0.293	0.000	0.014	0.014	0.69	0.15	0.54	0.91				
17.97	0.282	0.000	0.014	0.014	0.71	0.10	0.61	0.94				
18.97	0.268	0.000	0.012	0.012	0.79	0.13	0.66	0.94				
19.97	0.255	0.000	0.010	0.010	0.81	0.20	0.61	0.99				
20.97	0.242	0.000	0.009	0.009	0.81	0.14	0.67	0.98				
21.97	0.231	0.000	0.009	0.009	0.86	0.22	0.64	0.93				
22.97	0.221	0.000	0.009	0.009	0.80	0.19	0.60	0.94				
23.97	0.206	0.000	0.007	0.007	0.81	0.23	0.58	0.99				

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	23.3	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	22.2	0.00	0.00			
5.97		0.03	1.74			
6.97		0.18	12.24			
7.97	23.9	0.45	38.70			
8.97		0.72	81.36	30.02		8.00
9.97		1.00	140.80			
10.97	29.4	1.13	208.34			
11.97		1.11	274.98			
12.97		1.28	351.44			
13.97	31.1	0.88	405.04			
14.97		0.99	464.22			
15.97		0.76	510.28			
16.97	30.6	0.72	553.56			
17.97		0.42	579.36			
18.97		0.10	586.00			
19.97	27.8	0.01	586.78			
20.97		0.00	586.80			
21.97		0.00	586.80			
22.97	25.0	0.00	586.80			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8- 6-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.195	0.000	0.007	0.007	0.82	0.24	0.58	0.91				
1.97	0.182	0.000	0.007	0.007	0.75	0.19	0.56	0.90				
2.97	0.166	0.000	0.007	0.007	0.82	0.23	0.60	0.92				
3.97	0.149	0.000	0.006	0.006	0.75	0.26	0.49	0.86				
4.97	0.135	0.000	0.007	0.007	0.81	0.24	0.57	0.89				
5.97	0.135	0.000	0.007	0.007	0.79	0.26	0.53	0.86				
6.97	0.119	0.000	0.011	0.011	0.79	0.28	0.50	0.85				
7.97	0.105	0.000	0.011	0.011								
8.97	0.098	0.000	0.016	0.016	0.82	0.27	0.55	0.87	0.092	0.009	0.037	
9.97	0.104	0.000	0.016	0.016	0.84	0.27	0.57	0.81				
10.97	0.106	0.000	0.016	0.016	0.81	0.30	0.51	0.86				
11.97	0.120	0.000	0.017	0.017	0.74	0.23	0.51	0.86				
12.97	0.132	0.000	0.017	0.017	0.83	0.28	0.55	0.86				
13.97	0.181	0.000	0.017	0.017	0.78	0.29	0.49	0.87				
14.97	0.204	0.000	0.016	0.016	0.75	0.32	0.42	0.91				
15.97	0.202	0.000	0.016	0.016	0.84	0.34	0.50	0.89	0.236	0.011	0.021	
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	23.9	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	21.7	0.00	0.00			
5.97		0.00	0.00			
6.97		0.16	9.28			
7.97	23.3	0.26	24.68			
8.97		0.30	42.60			
9.97		0.30	60.60			
10.97	25.6	0.54	92.52			
11.97		0.44	119.12			
12.97		1.23	191.34			
13.97	28.3	0.99	251.22			
14.97		0.64	290.32			
15.97		0.45	317.70			
16.97	23.3	0.33	337.74			
17.97		0.13	345.94			
18.97		0.06	349.68			
19.97	23.3	0.00	349.80			
20.97		0.00	349.80			
21.97		0.00	349.80			
22.97	21.7	0.00	349.80			

% POSSIBLE MINUTES OF SUNSHINE 42

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8- 4-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	VOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000	0.50	0.11	0.39	0.00				
1.47	0.000	0.000	0.000	0.000	0.44	0.13	0.31	0.00				
2.47	0.000	0.000	0.000	0.000	0.45	0.08	0.37	0.02				
3.47	0.000	0.089	0.026	0.114	0.37	0.13	0.24	*				
4.47	0.000	0.087	0.024	0.110	1.09	0.11	0.98	*				
5.47	0.000	0.086	0.024	0.109	1.14	0.14	1.00	10.34				
6.47	0.000	0.080	0.094	0.174	1.20	0.11	1.09	10.34				
7.47	0.001	0.043	0.064	0.107	1.20	0.12	1.08	10.24				
8.47	0.039	0.005	0.091	0.096	0.74	0.12	0.62	9.33				
9.47	0.137	0.002	0.081	0.083	0.76	0.13	0.63	8.69				
10.47	0.246	0.002	0.062	0.064	0.79	0.12	0.67	7.87	0.292	0.046	0.065	
11.47	0.347	0.002	0.043	0.045	0.81	0.09	0.72	7.19				
12.47	0.401	0.001	0.032	0.033	0.71	0.15	0.56	6.66				
13.47	0.418	0.001	0.026	0.027	0.65	0.15	0.50	6.02				
14.47	0.406	0.001	0.021	0.022	0.73	0.14	0.59	5.56	0.441	0.022	0.032	
15.47	0.380	0.001	0.019	0.020	0.65	0.14	0.51	4.93				
16.47	0.347	0.001	0.017	0.018	0.66	0.15	0.51	4.21				
17.47	0.307	0.001	0.014	0.015	0.65	0.10	0.55	3.87				
18.47	0.270	0.001	0.012	0.013	0.60	0.14	0.47	3.52				
19.47	0.235	0.001	0.010	0.011	0.67	0.12	0.56	3.16				
20.47	0.201	0.001	0.006	0.007	0.75	0.14	0.62	2.87				
21.47	0.175	0.000	0.005	0.005	0.71	0.14	0.58	2.65				
22.47	0.155	0.000	0.004	0.004	0.73	0.14	0.59	2.44				
23.47	0.133	0.000	0.004	0.004	0.80	0.09	0.71	2.26				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	22.2	0.00	0.00			
5.47		0.02	0.56			
6.47		0.12	4.56			
7.47	22.8	0.35	18.20	28.60	7.00	
8.47		0.75	50.40			
9.47		0.99	102.12			
10.47	30.0	1.06	163.48			
11.47		1.30	233.80			
12.47		1.30	311.80			
13.47	32.2	0.92	379.16			
14.47		0.97	435.76			
15.47		0.67	485.56			
16.47	32.2	0.37	517.36			
17.47		0.11	532.28			
18.47		0.00	535.80			
19.47	27.2	0.00	535.80			
20.47		0.00	535.80			
21.47		0.00	535.80			
22.47	24.4	0.00	535.80			
23.47		0.00	535.80			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 92.0 CENT

*Instrument off-scale.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8- 5-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.116	0.000	0.002	0.002	0.76	0.11	0.65	2.08				
1.47	0.099	0.000	0.002	0.002	0.71	0.12	0.60	1.86				
2.47	0.086	0.000	0.001	0.001	0.69	0.15	0.54	1.71				
3.47	0.074	0.000	0.001	0.001	0.76	0.15	0.61	1.54				
4.47	0.061	0.000	0.001	0.001	0.64	0.12	0.52	1.45				
5.47	0.052	0.000	0.001	0.001	0.67	0.17	0.49	1.33				
6.47	0.043	0.000	0.001	0.001	0.51	0.16	0.35	1.26				
7.47	0.035	0.000	0.003	0.003	0.57	0.14	0.44	1.09				
8.47	0.039	0.000	0.005	0.005	0.61	0.10	0.50	1.08	0.040	0.007	0.030	
9.47	0.059	0.000	0.007	0.007	0.51	0.08	0.43	1.07				
10.47	0.086	0.000	0.009	0.009	0.57	0.17	0.40	1.07				
11.47	0.112	0.000	0.009	0.009								
12.47	0.137	0.000	0.009	0.009	0.53	0.11	0.42	1.08				
13.47	0.159	0.000	0.009	0.009	0.62	0.12	0.50	1.09				
14.47	0.175	0.000	0.009	0.009	0.65	0.10	0.55	1.06	0.181	0.017	0.042	
15.47	0.183	0.000	0.009	0.009	0.69	0.15	0.54	1.04				
16.47	0.183	0.000	0.009	0.009	0.65	0.13	0.52	1.04				
17.47	0.180	0.000	0.007	0.007	0.58	0.15	0.44	1.00				
18.47	0.171	0.000	0.005	0.005	0.63	0.18	0.45	1.02				
19.47	0.161	0.000	0.003	0.003	0.67	0.19	0.48	0.93				
20.47	0.148	0.000	0.003	0.003	0.63	0.18	0.45	0.99				
21.47	0.136	0.000	0.003	0.003	0.65	0.18	0.47	0.97				
22.47	0.123	0.000	0.002	0.002	0.66	0.19	0.47	0.98				
23.47	0.114	0.000	0.002	0.002	0.73	0.25	0.48	1.00				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	23.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	22.2	0.00	0.00			
5.47		0.03	0.84			
6.47		0.18	6.84			
7.47	23.9	0.45	25.20	28.60		7.00
8.47		0.72	59.76			
9.47		1.00	110.80			
10.47	29.4	1.13	174.44			
11.47		1.11	241.68			
12.47		1.28	313.04			
13.47	31.1	0.88	378.64			
14.47		0.99	434.52			
15.47		0.76	487.48			
16.47	30.6	0.72	531.96			
17.47		0.42	566.76			
18.47		0.14	584.12			
19.47	27.8	0.01	588.88			
20.47		0.00	589.20			
21.47		0.00	589.20			
22.47	25.0	0.00	589.20			
23.47		0.00	589.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 91.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8- 6-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NO<I (PPM)	NO2-S (PPM)	HCHO (PPM)	C* (/CM3)
0.47	0.102	0.000	0.002	0.002	0.75	0.20	0.55	0.94				
1.47	0.093	0.000	0.002	0.002	0.70	0.29	0.41	0.94				
2.47	0.082	0.000	0.002	0.002	0.80	0.27	0.52	0.95				
3.47	0.075	0.000	0.003	0.003	0.76	0.24	0.52	0.93				
4.47	0.065	0.000	0.004	0.004	0.75	0.29	0.47	0.95				
5.47	0.059	0.000	0.007	0.007	0.70	0.25	0.44	0.93				
6.47	0.051	0.000	0.011	0.011	0.79	0.22	0.57	0.93				
7.47	0.048	0.000	0.011	0.011	0.73	0.21	0.52	0.90				
8.47	0.056	0.000	0.011	0.011	0.68	0.23	0.45	0.85				
9.47	0.062	0.000	0.011	0.011	0.74	0.27	0.47	0.87	0.049	0.008	0.027	
10.47	0.073	0.000	0.011	0.011	0.74	0.26	0.48	0.98				
11.47	0.086	0.000	0.011	0.011	0.69	0.31	0.38	0.90				
12.47	0.110	0.000	0.011	0.011	0.74	0.34	0.40	0.90				
13.47	0.139	0.000	0.011	0.011	0.73	0.34	0.39	0.86				
14.47	0.153	0.000	0.010	0.010	0.77	0.35	0.43	0.88				
15.47	0.146	0.000	0.009	0.009	0.74	0.35	0.38	0.89	0.173	0.011	0.018	
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	23.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	21.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.16	4.48			
7.47	23.3	0.26	16.88			
8.47		0.30	33.60			
9.47		0.30	51.60			
10.47	25.6	0.54	76.32			
11.47		0.44	105.92			
12.47		1.23	154.44			
13.47	28.3	0.99	221.52			
14.47		0.64	271.12			
15.47		0.45	304.20			
16.47	23.3	0.33	327.84			
17.47		0.13	342.04			
18.47		0.06	347.88			
19.47	23.3	0.00	349.80			
20.47		0.00	349.80			
21.47		0.00	349.80			
22.47	21.7	0.00	349.80			
23.47		0.00	349.80			

% POSSIBLE MINUTES OF SUNSHINE 42

RDU AIRPORT MAXIMUM TEMPERATURE 84.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8- 8-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/0.75 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000								
1.80	0.000	0.000	0.000	0.000								
2.80	0.000	0.632	0.145	0.778								
3.80	0.000	0.632	0.145	0.778	4.75	1.26	3.49	8.54				
4.80	0.000	0.629	0.147	0.775		0.00		8.51				
5.80	0.000	0.617	0.150	0.767		0.00		8.48				
6.80	0.000	0.602	0.157	0.759	7.05	1.23	5.82	8.82**				
7.80	0.000	0.560	0.191	0.752	6.88	1.22	5.66	8.82				
8.80	0.000	0.390	0.330	0.721	6.82	1.22	5.60	8.92				
9.80	0.091	0.161	0.494	0.656	6.42	1.19	5.23	8.51	0.108	0.376	0.052	0
10.80	0.306	0.009	0.527	0.536	5.73	0.98	4.75	7.89				
11.80	0.540	0.001	0.409	0.410	5.03	1.13	3.90	7.06*				
12.80	0.757	0.001	0.283	0.284	4.62	0.99	3.63					
13.80	0.848	0.001	0.184	0.185	4.23	1.19	3.04	6.18				380
14.80	0.816	0.001	0.137	0.138	3.92	0.93	2.98	5.79				
15.80	0.752	0.001	0.111	0.112	3.55	1.16	2.40	5.42	0.610 ***	0.013	0.089	
16.80	0.676	0.001	0.096	0.097	3.28	1.19	2.09	5.13				
17.80	0.600	0.001	0.079	0.080	3.12	1.19	1.93	4.72				
18.80	0.533	0.001	0.068	0.070	3.00	1.03	1.97	4.29				
19.80	0.462	0.002	0.061	0.063	2.88	1.21	1.67	4.06				
20.80	0.399	0.004	0.053	0.058	2.78	1.19	1.59	3.74				
21.80	0.347	0.006	0.048	0.055	2.67	1.23	1.44	3.38				0
22.80	0.302	0.006	0.044	0.050	2.55	1.24	1.31	3.13				
23.80	0.268	0.006	0.040	0.046	2.46	1.21	1.25	2.86				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	19.4	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	17.8	0.00	0.00			
5.80		0.02	0.96			
6.80		0.10	6.00			
7.80	18.3	0.35	24.00			
8.80		0.49	51.72	29.73	8.67	
9.80		1.00	105.60			
10.80	25.0	1.08	169.44			
11.80		1.10	235.20			
12.80		1.23	307.44			
13.80	26.7	1.12	375.96			
14.80		0.83	429.24			
15.80		0.82	478.56			
16.80	27.8	0.33	504.24			
17.80		0.32	523.56			
18.80		0.05	529.80			
19.80	23.3	0.00	530.40			
20.80		0.00	530.40			
21.80		0.00	530.40			
22.80	19.4	0.00	530.40			
23.80		0.00	530.40			

% POSSIBLE MINUTES OF SUNSHINE 78

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

* Data Suspect and Deleted

** [CO] Shift Due to Range Change

*** Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8- 9-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/0.75 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.229	0.000	0.030	0.030	2.37	1.22	1.15	2.59				
1.80	0.201	0.002	0.031	0.033	2.35	1.23	1.12	2.43				
2.80	0.175	0.000	0.024	0.024	2.35	1.19	1.16	2.19				
3.80	0.151	0.000	0.021	0.021	2.20	1.19	1.01	1.97				
4.80	0.132	0.001	0.020	0.021	2.10	1.18	0.91	1.79				0
5.80	0.114	0.001	0.020	0.021	2.04	1.20	0.84	1.71				
6.80	0.097	0.001	0.018	0.019	1.95	1.20	0.75	1.53				
7.80	0.086	0.001	0.019	0.020	1.94	1.27	0.67	1.28				0
8.80	0.098	0.001	0.020	0.021	1.73	1.19	0.54	1.29	0.106	0.008	0.092	
9.80	0.141	0.001	0.022	0.024	1.66	1.16	0.50	1.13				
10.80	0.196	0.001	0.024	0.025	1.68	1.17	0.52	1.27				0
11.80	0.240	0.002	0.026	0.028	1.63	1.19	0.44	1.16				
12.80	0.281	0.002	0.027	0.029	1.59	1.16	0.43	1.22				
13.80	0.317	0.002	0.028	0.030	1.52	1.11	0.41	1.19				
14.80	0.335	0.002	0.027	0.029	1.62	1.20	0.42	1.23				
15.80	0.342	0.002	0.029	0.031					0.351	0.016	0.013	0
16.80	0.334	0.004	0.029	0.033								
17.80	0.324	0.002	0.025	0.027								
18.80	0.309	0.001	0.024	0.025								
19.80	0.291	0.001	0.021	0.022								
20.80	0.273	0.001	0.019	0.020								
21.80	0.252	0.001	0.018	0.019								
22.80	0.234	0.001	0.016	0.017								0
23.80	0.217	0.001	0.015	0.016								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	17.8	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	16.7	0.01	0.48			
5.80		0.14	7.32			
6.80		0.40	28.20			
7.80	18.9	0.67	65.16			
8.80		0.92	117.36	29.73		8.67
9.80		1.16	184.08			
10.80	25.6	1.17	254.16			
11.80		1.07	319.56			
12.80		1.22	390.96			
13.80	27.8	0.95	451.20			
14.80		0.84	502.92			
15.80		0.53	538.44			
16.80	28.9	0.32	560.16			
17.80		0.10	568.80			
18.80		0.00	570.00			
19.80	25.0	0.00	570.00			
20.80		0.00	570.00			
21.80		0.00	570.00			
22.80	21.1	0.00	570.00			
23.80		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8-10-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/0.75 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.202	0.001	0.014	0.015								
1.80	0.187	0.001	0.014	0.015	1.68	1.21	0.47	1.23				
2.80	0.172	0.001	0.013	0.014	1.74	1.16	0.58	1.23				
3.80	0.161	0.002	0.013	0.015	1.70	1.18	0.52	1.26				
4.80	0.150	0.002	0.013	0.015	1.72	1.20	0.52	1.31				0
5.80	0.138	0.002	0.013	0.015	1.75	1.20	0.55	1.35				
6.80	0.125	0.002	0.013	0.015	1.77	1.12	0.65	1.29				
7.80	0.116	0.002	0.019	0.021	1.73	1.13	0.59	1.26				0
8.80	0.122	0.002	0.022	0.025	1.64	1.14	0.50	1.25	0.154	0.011	0.033	
9.80	0.142	0.002	0.024	0.026	1.66	1.14	0.52	1.18				
10.80	0.193	0.002	0.025	0.027	1.63	1.20	0.44	1.34				0
11.80	0.242	0.002	0.026	0.028	1.70	1.13	0.57	1.32				
12.80	0.258	0.002	0.027	0.029	1.68	1.18	0.50	1.27				
13.80	0.272	0.003	0.026	0.029	1.70	1.12	0.57	1.36				
14.80	0.266	0.002	0.025	0.027	1.70	1.13	0.56	1.35	0.415	0.007	0.046	
15.80												0
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	20.6	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	16.7	0.00	0.00			
5.80		0.02	0.96			
6.80		0.18	9.84			
7.80	21.7	0.35	28.80			
8.80		0.73	68.04			
9.80		1.04	126.72			
10.80	26.1	1.11	192.48			
11.80		0.80	244.20			
12.80		0.69	286.92			
13.80	28.3	0.16	302.88			
14.80		0.08	308.64			
15.80		0.14	316.32			
16.80	23.9	0.16	325.68			
17.80		0.05	330.00			
18.80		0.00	330.60			
19.80	22.8	0.00	330.60			
20.80		0.00	330.60			
21.80		0.00	330.60			
22.80	22.2	0.00	330.60			

% POSSIBLE MINUTES OF SUNSHINE 45

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 8- 8-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.36 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000								
1.97	0.000	0.000	0.000	0.000								
2.97	0.000	0.311	0.067	0.379								
3.97	0.000	0.311	0.067	0.379	1.52	0.10	1.42					
4.97	0.000	0.309	0.066	0.375	3.16	0.11	3.05					
5.97	0.000	0.304	0.067	0.371	3.64	0.13	3.52					
6.97	0.000	0.297	0.073	0.370	3.67	0.10	3.57	10.25				
7.97	0.003	0.257	0.106	0.363	3.55	0.15	3.41	10.25				
8.97	0.052	0.130	0.214	0.344	3.49	0.10	3.39	10.25				0
9.97	0.185	0.018	0.264	0.282	3.09	0.08	3.02	9.33	0.220	0.231	0.030	
10.97	0.364	0.001	0.217	0.218	2.63	0.15	2.48	8.19				
11.97	0.536	0.001	0.159	0.160	2.35	0.18	2.17	7.47				
12.97	0.614	0.001	0.110	0.111	2.06	0.10	1.96	6.83				220
13.97	0.620	0.001	0.084	0.086	1.96	0.18	1.78	6.31				
14.97	0.587	0.001	0.072	0.073	1.76	0.15	1.61	5.81				
15.97	0.544	0.001	0.060	0.061	1.54	0.13	1.41	5.45	0.552	0.013	0.028	
16.97	0.482	0.001	0.052	0.053	1.39	0.11	1.28	4.99				
17.97	0.426	0.001	0.044	0.045	1.25	0.15	1.09	4.56				
18.97	0.373	0.001	0.037	0.039	1.20	0.13	1.06	3.95				
19.97	0.322	0.002	0.032	0.034	1.11	0.14	0.96	3.72				
20.97	0.278	0.004	0.030	0.034	1.03	0.14	0.89	3.23				
21.97	0.243	0.006	0.026	0.032	1.00	0.14	0.85	3.07				280
22.97	0.210	0.006	0.024	0.030	0.95	0.14	0.80	2.76				
23.97	0.182	0.004	0.021	0.026	0.88	0.19	0.70	2.23				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	19.4	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	17.8	0.00	0.00			
5.97		0.02	1.16			
6.97		0.10	7.00			
7.97	18.3	0.35	27.50	30.02	7.83	
8.97		0.49	56.62			
9.97		1.00	115.60			
10.97	25.0	1.08	180.24			
11.97		1.10	246.20			
12.97		1.23	319.74			
13.97	26.7	1.12	387.16			
14.97		0.83	437.54			
15.97		0.82	486.76			
16.97	27.8	0.33	507.54			
17.97		0.32	526.76			
18.97		0.05	530.30			
19.97	23.3	0.00	530.40			
20.97		0.00	530.40			
21.97		0.00	530.40			
22.97	19.4	0.00	530.40			
23.97		0.00	530.40			

% POSSIBLE MINUTES OF SUNSHINE 78

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8- 9-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.36 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.157	0.000	0.013	0.013	0.89	0.13	0.75	2.28				
1.97	0.136	0.002	0.016	0.018	0.80	0.15	0.65	2.04				
2.97	0.118	0.000	0.012	0.012	0.87	0.11	0.76	1.91				
3.97	0.102	0.000	0.011	0.011	0.75	0.11	0.64	1.63				
4.97	0.086	0.001	0.010	0.011	0.72	0.10	0.62	1.45				160
5.97	0.074	0.002	0.010	0.012	0.68	0.08	0.60	1.31				
6.97	0.060	0.000	0.007	0.007	0.69	0.14	0.56	1.25				
7.97	0.054	0.001	0.009	0.010	0.71	0.12	0.59	1.14				130
8.97	0.072	0.001	0.011	0.012	0.52	0.11	0.41	0.98	0.055	0.015	0.031	
9.97	0.107	0.001	0.013	0.014	0.56	0.12	0.45	0.98				
10.97	0.150	0.001	0.014	0.015	0.47	0.10	0.37	0.99				120
11.97	0.181	0.002	0.016	0.018	0.54	0.18	0.35	1.07				
12.97	0.210	0.001	0.017	0.018	0.45	0.06	0.39	1.04				
13.97	0.235	0.001	0.016	0.017	0.42	0.12	0.31	1.01				
14.97	0.248	0.002	0.017	0.019								
15.97	0.251	0.003	0.019	0.022					0.271	0.017	0.029	0
16.97	0.246	0.003	0.019	0.022								
17.97	0.238	0.001	0.017	0.018								
18.97	0.225	0.001	0.016	0.017								
19.97	0.214	0.001	0.014	0.015								
20.97	0.204	0.001	0.011	0.012								
21.97	0.193	0.001	0.010	0.011								0
22.97	0.182	0.001	0.009	0.010								
23.97	0.171	0.001	0.003	0.004								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	17.8	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	16.7	0.01	0.58			
5.97		0.14	8.72			
6.97		0.40	32.20			
7.97	18.9	0.67	71.86	30.02		7.83
8.97		0.92	126.56			
9.97		1.16	195.68			
10.97	25.6	1.17	265.86			
11.97		1.07	330.26			
12.97		1.22	403.16			
13.97	27.8	0.95	460.70			
14.97		0.84	511.32			
15.97		0.53	543.74			
16.97	28.9	0.32	563.36			
17.97		0.10	569.80			
18.97		0.00	570.00			
19.97	25.0	0.00	570.00			
20.97		0.00	570.00			
21.97		0.00	570.00			
22.97	21.1	0.00	570.00			
23.97		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8-10-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.36 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.159	0.001	0.003	0.004	0.91	0.27	0.64	0.98				
1.97	0.150	0.001	0.003	0.004	0.86	0.26	0.60	1.01				
2.97	0.139	0.001	0.002	0.003	0.94	0.22	0.73	1.01				
3.97	0.128	0.002	0.002	0.004	0.94	0.29	0.65	1.00				
4.97	0.120	0.002	0.002	0.004	0.99	0.28	0.70	1.08				180
5.97	0.111	0.002	0.002	0.004	1.00	0.26	0.73	1.08				
6.97	0.099	0.002	0.002	0.004	0.95	0.28	0.67	1.05				
7.97	0.093	0.002	0.003	0.005	0.96	0.28	0.68	1.05				120
8.97	0.097	0.002	0.006	0.009	0.94	0.25	0.69	1.05	0.131	0.008	0.016	
9.97	0.114	0.002	0.007	0.010	0.85	0.28	0.57	1.05				
10.97	0.146	0.002	0.009	0.011	0.86	0.26	0.60	1.06				120
11.97	0.178	0.002	0.009	0.011	0.92	0.33	0.59	1.03				
12.97	0.191	0.002	0.009	0.011	0.89	0.30	0.59	1.07				
13.97	0.215	0.003	0.010	0.013	0.95	0.32	0.63	1.03				
14.97	0.191	0.003	0.010	0.013	0.91	0.32	0.59	0.98	0.318	0.009	0.020	
15.97												220
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	20.6	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	16.7	0.00	0.00			
5.97		0.02	1.16			
6.97		0.18	11.64			
7.97	21.7	0.35	32.30			
8.97		0.73	75.34			
9.97		1.04	137.12			
10.97	26.1	1.11	203.58			
11.97		0.80	252.20			
12.97		0.69	293.82			
13.97	28.3	0.16	304.48			
14.97		0.08	309.44			
15.97		0.14	317.72			
16.97	23.9	0.16	327.28			
17.97		0.05	330.50			
18.97		0.00	330.60			
19.97	22.8	0.00	330.60			
20.97		0.00	330.60			
21.97		0.00	330.60			
22.97	22.2	0.00	330.60			

% POSSIBLE MINUTES OF SUNSHINE 45

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8- 8-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.428	0.097	0.525								
3.13	0.000	0.428	0.097	0.525	1.05	0.14	0.91	8.77				
4.13	0.000	0.420	0.097	0.518	2.69	0.12	2.57	8.76				
5.13	0.000	0.415	0.099	0.514	3.24	0.15	3.09	8.79				
6.13	0.000	0.402	0.105	0.507	3.44	0.13	3.31	9.33*				
7.13	0.000	0.360	0.136	0.496	3.27	0.18	3.08	9.23				
8.13	0.004	0.249	0.224	0.473	3.09	0.15	2.94	9.02				0
9.13	0.072	0.109	0.313	0.422	2.86	0.11	2.76	8.51	0.070	0.347	0.062	
10.13	0.182	0.012	0.338	0.350	2.53	0.13	2.41	7.57				
11.13	0.317	0.001	0.275	0.276	2.35	0.13	2.22	6.90				
12.13	0.453	0.001	0.205	0.206	2.11	0.18	1.93	6.49				380
13.13	0.560	0.001	0.143	0.144	1.89	0.14	1.75	5.92				
14.13	0.589	0.001	0.099	0.101	1.63	0.15	1.48	5.33				
15.13	0.561	0.001	0.075	0.076	1.45	0.13	1.31	4.95	0.564	0.017	0.029	
16.13	0.495	0.001	0.060	0.061	1.38	0.10	1.28	4.41				
17.13	0.440	0.001	0.049	0.050	1.30	0.12	1.17	4.20				
18.13	0.384	0.001	0.041	0.042	1.11	0.09	1.02	3.84				
19.13	0.332	0.002	0.035	0.037	1.03	0.13	0.90	3.39				
20.13	0.285	0.004	0.031	0.035	1.03	0.15	0.88	3.00				
21.13	0.247	0.005	0.029	0.034	0.99	0.10	0.89	2.82				460
22.13	0.214	0.006	0.026	0.032	0.98	0.11	0.87	2.49				
23.13	0.187	0.005	0.024	0.029	0.99	0.18	0.81	2.20				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	19.4	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	17.8	0.00	0.00			
5.13		0.02	0.16			
6.13		0.10	2.00			
7.13	18.3	0.35	10.00			
8.13		0.49	32.12	30.02	8.67	
9.13		1.00	65.60			
10.13	25.0	1.08	126.24			
11.13		1.10	191.20			
12.13		1.23	258.24			
13.13	26.7	1.12	331.16			
14.13		0.83	396.04			
15.13		0.82	445.76			
16.13	27.8	0.33	491.04			
17.13		0.32	510.76			
18.13		0.05	527.80			
19.13	23.3	0.00	530.40			
20.13		0.00	530.40			
21.13		0.00	530.40			
22.13	19.4	0.00	530.40			
23.13		0.00	530.40			

% POSSIBLE MINUTES OF SUNSHINE 78

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

* [CO] Shift Due to Range Change

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8- 9-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.162	0.000	0.014	0.014	0.82	0.15	0.68	1.96				
1.13	0.140	0.002	0.018	0.020	0.82	0.12	0.70	1.87				
2.13	0.121	0.000	0.013	0.013	0.85	0.19	0.66	1.58				
3.13	0.106	0.001	0.012	0.013	0.72	0.10	0.62	1.55				210
4.13	0.091	0.002	0.012	0.014	0.69	0.14	0.55	1.33				
5.13	0.077	0.001	0.011	0.012	0.65	0.14	0.50	1.20				
6.13	0.065	0.000	0.010	0.010	0.67	0.14	0.52	1.18				200
7.13	0.063	0.001	0.010	0.011	0.69	0.06	0.63	1.04				
8.13	0.080	0.001	0.012	0.013	0.55	0.15	0.40	0.96	0.053*	0.006	0.026	
9.13	0.116	0.001	0.013	0.014	0.46	0.15	0.31	0.95				170
10.13	0.151	0.001	0.014	0.015	0.47	0.16	0.31	0.89				
11.13	0.181	0.002	0.014	0.016	0.49	0.18	0.30	0.63				
12.13	0.210	0.002	0.014	0.016	0.50	0.12	0.38	0.92				
13.13	0.232	0.001	0.014	0.015	0.42	0.15	0.27	0.92				
14.13	0.242	0.001	0.014	0.015					0.252	0.018	0.066*	140
15.13	0.246	0.003	0.018	0.021								
16.13	0.240	0.002	0.017	0.019								
17.13	0.230	0.002	0.015	0.017								
18.13	0.218	0.002	0.014	0.016								
19.13	0.202	0.002	0.013	0.015								
20.13	0.198	0.001	0.010	0.011								0
21.13	0.174	0.001	0.009	0.010								
22.13	0.161	0.001	0.009	0.010								
23.13	0.150	0.001	0.009	0.010								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.7	0.01	0.08			
5.13		0.14	1.72			
6.13		0.40	12.20			
7.13	18.9	0.67	38.36			
8.13		0.92	80.56	30.02		8.67
9.13		1.16	137.68			
10.13	25.6	1.17	207.36			
11.13		1.07	276.76			
12.13		1.22	342.16			
13.13	27.8	0.95	413.20			
14.13		0.84	469.32			
15.13		0.53	517.24			
16.13	28.9	0.32	547.36			
17.13		0.10	564.80			
18.13		0.00	570.00			
19.13	25.0	0.00	570.00			
20.13		0.00	570.00			
21.13		0.00	570.00			
22.13	21.1	0.00	570.00			
23.13		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8-10-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.139	0.002	0.009	0.011								
1.13	0.128	0.001	0.007	0.009	0.69	0.06	0.64	1.06				
2.13	0.118	0.001	0.007	0.009	0.63	0.05	0.57	0.98				
3.13	0.111	0.002	0.006	0.009	0.72	0.11	0.61	0.93				
4.13	0.105	0.002	0.006	0.009	0.69	0.07	0.62	0.97				160
5.13	0.097	0.002	0.006	0.009	0.62	0.05	0.57	1.03				
6.13	0.086	0.002	0.007	0.010	0.67	0.11	0.56	1.14				
7.13	0.086	0.002	0.011	0.013	0.75	0.08	0.66	0.95				180
8.13	0.095	0.002	0.013	0.015	0.72	0.13	0.59	1.06	0.074*	0.008	0.030	
9.13	0.119	0.002	0.014	0.016	0.69	0.07	0.63	1.03				
10.13	0.161	0.002	0.015	0.017	0.67	0.10	0.57	1.02				120
11.13	0.189	0.002	0.016	0.018	0.65	0.05	0.59	1.04				
12.13	0.197	0.002	0.017	0.019	0.69	0.09	0.61	0.96				
13.13	0.212	0.003	0.016	0.019	0.65	0.11	0.54	1.04				
14.13	0.198	0.002	0.015	0.017	0.65	0.09	0.56		0.254	0.007	0.067*	
15.13												0
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	20.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.7	0.00	0.00			
5.13		0.02	0.16			
6.13		0.18	2.64			
7.13	21.7	0.35	14.80			
8.13		0.73	38.84			
9.13		1.04	85.12			
10.13	26.1	1.11	148.08			
11.13		0.80	212.20			
12.13		0.69	259.32			
13.13	28.3	0.16	296.48			
14.13		0.08	305.44			
15.13		0.14	310.72			
16.13	23.9	0.16	319.28			
17.13		0.05	328.00			
18.13		0.00	330.60			
19.13	22.8	0.00	330.60			
20.13		0.00	330.60			
21.13		0.00	330.60			
22.13	22.2	0.00	330.60			

% POSSIBLE MINUTES OF SUNSHINE 45

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

* Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8- 8-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.14 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.130	0.029	0.159	0.94	0.10	0.83					
3.63	0.000	0.130	0.029	0.159	0.99	0.14	0.85					
4.63	0.000	0.129	0.027	0.156	1.04	0.11	0.93					
5.63	0.000	0.128	0.026	0.154	0.75	0.10	0.64	10.46				
6.63	0.000	0.127	0.025	0.152	0.75	0.11	0.64	10.35				200
7.63	0.000	0.124	0.027	0.151	0.75	0.13	0.62	10.25				
8.63	0.000	0.105	0.042	0.147	0.69	0.06	0.62	9.74	0.062	0.099	0.021	
9.63	0.020	0.072	0.066	0.138	0.70	0.15	0.55	8.37				
10.63	0.075	0.021	0.095	0.117	0.62	0.11	0.51	7.77				550
11.63	0.145	0.003	0.095	0.098	0.62	0.09	0.53	6.77				
12.63	0.225	0.001	0.073	0.074	0.63	0.13	0.50	6.41				
13.63	0.293	0.001	0.053	0.055	0.60	0.11	0.49	5.61				
14.63	0.323	0.001	0.039	0.040	0.58	0.16	0.42	5.44	0.293	0.012	0.032	
15.63	0.317	0.001	0.030	0.031	0.55	0.13	0.42	4.88				
16.63	0.294	0.001	0.024	0.025	0.54	0.12	0.42	4.51				
17.63	0.261	0.001	0.019	0.020	0.60	0.06	0.54	4.16				
18.63	0.230	0.000	0.015	0.015	0.57	0.12	0.46	3.77				
19.63	0.201	0.001	0.014	0.015	0.63	0.16	0.47	3.55				280
20.63	0.175	0.003	0.013	0.016	0.63	0.09	0.54	3.18				
21.63	0.155	0.005	0.012	0.017	0.72	0.19	0.53	2.88				
22.63	0.139	0.005	0.011	0.016	0.69	0.11	0.59	2.66				
23.63	0.133	0.006	0.011	0.017								

% POSSIBLE MINUTES OF SUNSHINE 78

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	19.4	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	17.8	0.00	0.00			
5.63		0.02	0.76			
6.63		0.10	5.00			
7.63	18.3	0.35	20.50			
8.63		0.49	46.82	28.60	8.67	
9.63		1.00	95.60			
10.63	25.0	1.08	158.64			
11.63		1.10	224.20			
12.63		1.23	295.14			
13.63	26.7	1.12	364.76			
14.63		0.83	420.94			
15.63		0.82	470.36			
16.63	27.8	0.33	500.94			
17.63		0.32	520.36			
18.63		0.05	529.30			
19.63	23.3	0.00	530.40			
20.63		0.00	530.40			
21.63		0.00	530.40			
22.63	19.4	0.00	530.40			
23.63		0.00	530.40			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8- 9-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.14 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.108	0.000	0.002	0.002	0.72	0.03	0.69	2.40				
1.63	0.097	0.002	0.006	0.009	0.71	0.10	0.61	2.24				
2.63	0.086	0.000	0.002	0.002	0.68	0.18	0.50	1.99				
3.63	0.075	0.000	0.002	0.002	0.65	0.13	0.53	1.81				
4.63	0.068	0.001	0.002	0.003	0.75	0.14	0.61	1.73				200
5.63	0.059	0.002	0.002	0.004	0.68	0.13	0.55	1.53				
6.63	0.051	0.001	0.001	0.002	0.67	0.20	0.47	1.45				
7.63	0.043	0.001	0.001	0.002	0.64	0.15	0.49	1.34				160
8.63	0.043	0.002	0.003	0.005	0.63	0.16	0.47	1.19	0.039	0.005	0.095*	
9.63	0.056	0.002	0.003	0.005	0.57	0.18	0.38	1.14				
10.63	0.078	0.001	0.004	0.005	0.61	0.16	0.45	1.14				220
11.63	0.098	0.002	0.006	0.009	0.60	0.13	0.47	1.22				
12.63	0.118	0.002	0.007	0.010	0.52	0.08	0.44	1.06				
13.63	0.137	0.002	0.007	0.010	0.62	0.11	0.51	1.10				
14.63	0.150	0.002	0.009	0.011								
15.63	0.153	0.002	0.009	0.011					0.154	0.012	0.006	130
16.63	0.153	0.004	0.012	0.016								
17.63	0.150	0.002	0.009	0.011								
18.63	0.141	0.001	0.007	0.009								
19.63	0.135	0.001	0.007	0.009								
20.63	0.128	0.001	0.006	0.007								
21.63	0.120	0.001	0.004	0.005								0
22.63	0.112	0.001	0.003	0.004								
23.63	0.107	0.001	0.009	0.010								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.7	0.01	0.38			
5.63		0.14	5.92			
6.63		0.40	24.20			
7.63	18.9	0.67	58.46			
8.63		0.92	108.16	28.60		8.67
9.63		1.16	172.48			
10.63	25.6	1.17	242.46			
11.63		1.07	308.86			
12.63		1.22	378.76			
13.63	27.8	0.95	441.70			
14.63		0.84	494.52			
15.63		0.53	533.14			
16.63	28.9	0.32	556.96			
17.63		0.10	567.80			
18.63		0.00	570.00			
19.63	25.0	0.00	570.00			
20.63		0.00	570.00			
21.63		0.00	570.00			
22.63	21.1	0.00	570.00			
23.63		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8-10-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.14 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.099	0.002	0.009	0.011	0.88	0.13	0.76	0.92				
1.63	0.093	0.002	0.007	0.010	0.87	0.13	0.74	0.92				
2.63	0.086	0.002	0.007	0.010	0.83	0.07	0.76	0.95				
3.63	0.081	0.002	0.007	0.010	0.81	0.17	0.63	0.96				
4.63	0.075	0.002	0.009	0.011	0.91	0.07	0.84	0.86				
5.63	0.071	0.002	0.007	0.010	0.84	0.11	0.73	0.86				210
6.63	0.064	0.002	0.009	0.011	0.82	0.11	0.71	0.99				
7.63	0.061	0.002	0.012	0.014	0.83	0.12	0.71	0.91				
8.63	0.061	0.002	0.015	0.017	0.75	0.13	0.62	0.94	0.042	0.005	0.012	130
9.63	0.072	0.002	0.015	0.017	0.90	0.15	0.75	0.96				
10.63	0.092	0.002	0.017	0.019	0.88	0.15	0.73	0.96				
11.63	0.118	0.002	0.017	0.019	0.86	0.21	0.65	0.96				150
12.63	0.128	0.002	0.017	0.019	0.80	0.16	0.64	0.92				
13.63	0.139	0.003	0.016	0.019	0.77	0.16	0.61	1.14				
14.63	0.138	0.002	0.015	0.017	0.83	0.16	0.67	0.99	0.074	0.007	0.067*	
15.63												180
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	20.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.7	0.00	0.00			
5.63		0.02	0.76			
6.63		0.18	8.04			
7.63	21.7	0.35	25.30			
8.63		0.73	60.74			
9.63		1.04	116.32			
10.63	26.1	1.11	181.38			
11.63		0.80	236.20			
12.63		0.69	280.02			
13.63	28.3	0.16	301.28			
14.63		0.08	307.84			
15.63		0.14	314.92			
16.63	23.9	0.16	324.08			
17.63		0.05	329.50			
18.63		0.00	330.60			
19.63	22.8	0.00	330.60			
20.63		0.00	330.60			
21.63		0.00	330.60			
22.63	22.2	0.00	330.60			

% POSSIBLE MINUTES OF SUNSHINE 45

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

* Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8-12-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.544	0.210	0.754								
3.63	0.000	0.809	0.195	1.003								
4.63	0.000	0.800	0.202	1.002								0
5.63	0.000	0.776	0.207	0.984								
6.63	0.000	0.729	0.236	0.966								
7.63	0.000	0.538	0.383	0.921								
8.63	0.000	0.225	0.617	0.842	7.50	1.03	6.47	8.94	0.175*	0.859	0.243	0
9.63	0.049	0.017	0.735	0.752	7.39	1.08	6.31	8.84				
10.63	0.291	0.000	0.622	0.622		1.16		8.66				
11.63	0.616	0.000	0.460	0.460	6.44	1.12	5.31	8.84				
12.63	0.964	0.000	0.295	0.295								
13.63	1.069	0.000	0.219	0.219		1.03		8.84				420
14.63	1.179	0.000	0.184	0.184		1.14		9.03	1.427	0.028	0.286	
15.63	1.144	0.000	0.159	0.159		1.14		8.94				
16.63	1.083	0.000	0.133	0.133		1.15		8.94				
17.63	1.012	0.000	0.117	0.117		1.13		8.94				
18.63	0.960	0.000	0.104	0.104		1.15		8.94				
19.63	0.916	0.000	0.094	0.094		1.09		8.94				
20.63	0.877	0.000	0.086	0.086		1.09		8.94				0
21.63	0.835	0.000	0.081	0.081		1.15		9.19				
22.63	0.788	0.000	0.075	0.075	5.09	1.20	3.89	9.29				
23.63	0.741	0.000	0.071	0.071		1.12		9.09				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	20.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.0	0.00	0.00			
5.63		0.01	0.38			
6.63		0.14	5.92			
7.63	21.1	0.37	23.06			
8.63		0.72	58.56			
9.63		0.85	106.70			
10.63	28.3	1.12	167.96			
11.63		1.06	232.88			
12.63		1.22	302.56			
13.63	30.6	1.22	375.76			
14.63		0.98	439.84			
15.63		0.85	493.70			
16.63	31.1	0.31	524.18			
17.63		0.16	537.08			
18.63		0.08	543.64			
19.63	27.8	0.00	545.40			
20.63		0.00	545.40			
21.63		0.00	545.40			
22.63	23.9	0.00	545.40			
23.63		0.00	545.40			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

*Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8-13-75

URBAN MIX 0% DILUTION PAGE 2
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.700	0.000	0.066	0.066								
1.63	0.664	0.000	0.063	0.063		1.17		9.19				
2.63	0.630	0.000	0.060	0.060	5.04	1.24	3.81	9.09				
3.63	0.597	0.000	0.057	0.057		1.27		9.09				
4.63	0.567	0.000	0.055	0.055		1.22		9.09				
5.63	0.544	0.000	0.053	0.053	5.05	1.20	3.85	9.09				0
6.63	0.513	0.000	0.053	0.053	5.03	1.20	3.83	9.09				
7.63	0.479	0.000	0.063	0.063	5.01	1.19	3.82	8.99				
8.63	0.451	0.000	0.066	0.066	4.88	1.02	3.86	9.04	0.512	0.020	0.267	
9.63	0.451	0.000	0.068	0.068	4.81	1.23	3.58	8.98				
10.63	0.480	0.000	0.070	0.070	4.74	1.23	3.51	8.98				
11.63	0.523	0.000	0.067	0.067	4.67	1.23	3.44	8.90				
12.63	0.565	0.000	0.066	0.066	4.57	1.17	3.41	8.84				0
13.63	0.597	0.000	0.064	0.064	4.48	1.14	3.34	8.95				
14.63	0.618	0.000	0.063	0.063	4.38	1.25	3.13	8.98	0.626	0.009	0.137	
15.63	0.619	0.000	0.061	0.061	4.33	1.22	3.11	8.89				
16.63	0.601	0.000	0.056	0.056	4.24	1.26	2.98	8.90				
17.63	0.578	0.000	0.052	0.052	4.32	1.15	3.16	8.84				0
18.63	0.549	0.000	0.047	0.047								
19.63	0.526	0.000	0.044	0.044	4.25	1.20	3.05	8.94				
20.63	0.501	0.000	0.043	0.043	4.25	1.19	3.07	8.84				
21.63	0.471	0.000	0.041	0.041	4.27	1.21	3.06	8.83				0
22.63	0.441	0.000	0.041	0.041	4.23	1.34	2.90	8.75				
23.63	0.413	0.000	0.040	0.040	4.24	1.20	3.04	8.81				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.9	0.00	0.00			
5.63		0.02	0.76			
6.63		0.15	6.90			
7.63	20.6	0.39	25.02			
8.63		0.67	59.06			
9.63		0.93	109.14			
10.63	28.3	1.13	172.54			
11.63		1.23	244.14			
12.63		1.28	319.84			
13.63	31.1	1.25	395.50			
14.63		1.10	464.80			
15.63		0.84	520.92			
16.63	32.2	0.62	562.96			
17.63		0.31	588.38			
18.63		0.09	598.62			
19.63	28.3	0.01	600.98			
20.63		0.00	601.20			
21.63		0.00	601.20			
22.63	22.8	0.00	601.20			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8-14-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.385	0.000	0.037	0.037	4.27	1.21	3.07	8.72				
1.63	0.361	0.000	0.035	0.035	4.27	1.21	3.06	8.60				
2.63	0.339	0.000	0.035	0.035	4.18	1.17	3.01	8.63				
3.63	0.317	0.000	0.035	0.035	4.19	1.18	3.01	8.64				
4.63	0.296	0.000	0.035	0.035	4.23	1.20	3.03	8.52				0
5.63	0.276	0.000	0.035	0.035	4.71	1.26	3.46	8.62				
6.63	0.253	0.000	0.035	0.035	4.69	1.23	3.46	8.61				
7.63	0.231	0.000	0.041	0.041	4.64	1.28	3.35	8.65				
8.63	0.234	0.000	0.051	0.051	4.33	1.31	3.02	8.68				
9.63	0.274	0.000	0.055	0.055	4.07	1.21	2.86	8.56	0.302	0.015	0.109	
10.63	0.339	0.000	0.056	0.056	4.55	1.20	3.36	8.48				
11.63	0.398	0.000	0.057	0.057	4.52	1.25	3.28	8.56				
12.63	0.447	0.000	0.057	0.057	3.87	1.23	2.64	8.40				
13.63	0.492	0.000	0.057	0.057	3.89	1.23	2.65	8.41	0.641	0.017	0.036	0
14.63	0.524	0.000	0.056	0.056	3.82	1.27	2.55	8.47				
15.63												
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	21.7	0.00	0.00			
5.63		0.01	0.38			
6.63		0.15	6.30			
7.63	22.8	0.30	21.00			
8.63		0.68	53.44			
9.63		0.94	104.12			
10.63	29.4	1.14	168.12			
11.63		1.12	235.76			
12.63		1.22	306.76			
13.63	32.2	1.24	380.72			
14.63		1.08	449.04			
15.63		0.75	501.30			
16.63	32.2	0.50	536.80			
17.63		0.27	556.06			
18.63		0.06	566.28			
19.63	27.8	0.01	567.98			
20.63		0.00	568.20			
21.63		0.00	568.20			
22.63	24.4	0.00	568.20			

% POSSIBLE MINUTES OF SUNSHINE 79

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 8-12-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOXI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000	1.26	0.52	0.74	0.00				
1.80	0.000	0.000	0.000	0.000								
2.80	0.000	0.194	0.049	0.243								
3.80	0.000	0.195	0.046	0.241	4.34	0.63	3.71	7.22				
4.80	0.424	0.000	0.024	0.024	3.29	0.69	2.60	9.89				0
5.80	0.000	0.189	0.049	0.238	4.79	0.67	4.12	9.73				
6.80	0.000	0.153	0.076	0.229	4.79	0.52	4.27	9.14				
7.80	0.050	0.007	0.193	0.200								
8.80	0.228	0.000	0.163	0.163	4.36	0.61	3.75	9.93	0.375	0.142	0.110	180
9.80	0.415	0.000	0.129	0.129	4.04	0.45	3.59	9.83				
10.80	0.603	0.000	0.107	0.107	3.97	0.58	3.39					
11.80	0.694	0.000	0.095	0.095	3.80	0.53	3.26	9.61				
12.80	0.729	0.000	0.088	0.088	3.65	0.54	3.11					
13.80	0.757	0.000	0.078	0.078	3.44	0.55	2.89	9.71				160
14.80	0.758	0.000	0.072	0.072	3.35	0.53	2.82	9.61	0.916	0.012	0.087	
15.80	0.745	0.000	0.062	0.062	3.36	0.51	2.84	9.61				
16.80	0.711	0.000	0.053	0.053	3.30	0.51	2.79	9.71				
17.80	0.674	0.000	0.047	0.047	3.29	0.57	2.73	9.61				
18.80	0.644	0.000	0.043	0.043	3.36	0.65	2.71	9.71				
19.80	0.621	0.000	0.040	0.040	3.29	0.59	2.70	9.80				
20.80	0.600	0.000	0.035	0.035	3.31	0.56	2.75	9.61				0
21.80	0.578	0.000	0.034	0.034								
22.80	0.565	0.000	0.032	0.032	3.27	0.60	2.67	9.89				
23.80	0.526	0.000	0.030	0.030	3.30	0.62	2.68	9.89				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	20.6	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.0	0.00	0.00			
5.80		0.01	0.48			
6.80		0.15	7.80			
7.80	21.1	0.37	27.36			
8.80		0.72	66.36			
9.80		0.85	115.80			
10.80	28.3	1.12	179.76			
11.80		1.06	244.08			
12.80		1.22	315.36			
13.80	30.6	1.22	388.56			
14.80		0.98	450.24			
15.80		0.85	502.80			
16.80	31.1	0.31	527.88			
17.80		0.16	539.28			
18.80		0.08	545.04			
19.80	27.8	0.00	546.00			
20.80		0.00	546.00			
21.80		0.00	546.00			
22.80	23.9	0.00	546.00			
23.80		0.00	546.00			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8-13-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.502	0.000	0.029	0.029								
1.80	0.480	0.000	0.028	0.028	3.27	0.68	2.59	9.99				
2.80	0.458	0.000	0.025	0.025	3.32	0.63	2.69	9.99				
3.80	0.439	0.000	0.024	0.024	3.31	0.69	2.62	9.89				
4.80	0.000	0.194	0.045	0.238	4.94	0.60	4.34	9.89				160
5.80	0.406	0.000	0.022	0.022	3.40	0.59	2.81	9.79				
6.80	0.385	0.000	0.022	0.022	3.39	0.60	2.78	9.89				
7.80	0.361	0.000	0.029	0.029	3.25	0.68	2.58	9.79				
8.80	0.339	0.000	0.031	0.031	3.25	0.65	2.60		0.385	0.014	0.102	
9.80	0.334	0.000	0.033	0.033	3.17	0.69	2.48					
10.80	0.349	0.000	0.034	0.034	3.02	0.58	2.44					
11.80	0.374	0.000	0.034	0.034	3.06	0.62	2.43					0
12.80	0.404	0.000	0.034	0.034	3.00	0.62	2.38					
13.80	0.429	0.000	0.034	0.034	2.98	0.62	2.35					
14.80	0.446	0.000	0.034	0.034	2.85	0.66	2.19		0.470	0.009		
15.80	0.449	0.000	0.034	0.034	2.88	0.68	2.20					
16.80	0.441	0.000	0.034	0.034	2.81	0.56	2.25					0
17.80	0.425	0.000	0.032	0.032	2.87	0.68	2.19					
18.80	0.404	0.000	0.029	0.029								
19.80	0.387	0.000	0.026	0.026	2.77	0.64	2.13					
20.80	0.373	0.000	0.024	0.024	2.81	0.68	2.13					0
21.80	0.356	0.000	0.024	0.024	2.85	0.67	2.18					
22.80	0.338	0.000	0.022	0.022	2.81	0.73	2.09					
23.80	0.319	0.000	0.021	0.021	2.81	0.73	2.09					

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	18.9	0.00	0.00			
5.80		0.02	0.96			
6.80		0.14	7.92			
7.80	20.6	0.39	28.32			
8.80		0.67	65.16			
9.80		0.93	117.84			
10.80	28.3	1.13	185.24			
11.80		1.23	255.84			
12.80		1.28	332.04			
13.80	31.1	1.25	407.40			
14.80		1.10	475.20			
15.80		0.84	528.72			
16.80	32.2	0.62	568.56			
17.80		0.31	590.88			
18.80		0.09	598.92			
19.80	28.3	0.01	600.48			
20.80		0.00	600.60			
21.80		0.00	600.60			
22.80	22.8	0.00	600.60			
23.80		0.00	600.60			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 91.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8-14-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.301	0.000	0.020	0.020	2.76	0.71	2.05					
1.80	0.285	0.000	0.020	0.020	2.86	0.69	2.17	9.26				
2.80	0.270	0.000	0.019	0.019	2.85	0.65	2.20	9.20				
3.80	0.258	0.000	0.019	0.019	2.82	0.72	2.10	9.15				
4.80	0.245	0.000	0.019	0.019	2.73	0.70	2.02	9.30				
5.80	0.229	0.000	0.019	0.019	2.90	0.67	2.23	9.13				120
6.80	0.214	0.000	0.019	0.019	2.89	0.69	2.19	9.29				
7.80	0.195	0.000	0.022	0.022	2.74	0.77	1.97	9.30				
8.80	0.195	0.000	0.028	0.029	2.81	0.74	2.07	9.23				
9.80	0.220	0.000	0.030	0.030	2.76	0.74	2.02	9.21	0.234	0.011	0.048	
10.80	0.263	0.000	0.031	0.031	2.68	0.76	1.92	9.14				
11.80	0.302	0.000	0.033	0.033	2.71	0.68	2.02	9.05				
12.80	0.336	0.000	0.033	0.033	2.66	0.74	1.92	9.12				
13.80	0.375	0.000	0.033	0.033	2.63	0.76	1.87	9.09	0.521	0.023	0.083	0
14.80	0.399	0.000	0.033	0.033	2.60	0.69	1.91	8.93				
15.80												
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	21.7	0.00	0.00			
5.80		0.01	0.48			
6.80		0.15	7.80			
7.80	22.8	0.30	24.00			
8.80		0.68	60.24			
9.80		0.94	113.52			
10.80	29.4	1.14	179.52			
11.80		1.12	246.96			
12.80		1.23	319.44			
13.80	32.2	1.24	393.72			
14.80		1.08	460.44			
15.80		0.75	509.40			
16.80	32.2	0.50	542.40			
17.80		0.27	561.36			
18.80		0.06	567.48			
19.80	27.8	0.01	568.68			
20.80		0.00	568.80			
21.80		0.00	568.80			
22.80	24.4	0.00	568.20			
23.80		0.00	568.20			

% POSSIBLE MINUTES OF SUNSHINE 79

RDU AIRPORT MAXIMUM TEMPERATURE 91.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8-12-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000	0.56	0.10	0.46	0.00				
1.97	0.000	0.000	0.000	0.000								
2.97	0.000	0.587	0.147	0.734								
3.97	0.000	0.585	0.138	0.723	3.31	0.06	3.25	9.01				
4.97	0.000	0.574	0.138	0.712	3.97	0.16	3.81	8.76				130
5.97	0.000	0.557	0.141	0.698	3.78	0.14	3.64	8.84				
6.97	0.000	0.517	0.164	0.680	3.83	0.14	3.69	7.65				
7.97	0.000	0.396	0.256	0.651								
8.97	0.000	0.283	0.381	0.664					*	0.550	0.029	0
9.97	0.011	0.068	0.479	0.548								
10.97	0.097	0.002	0.484	0.487	3.24	0.10	3.15	8.78				
11.97	0.255	0.000	0.415	0.415	3.02	0.12	2.90	8.84				
12.97	0.430	0.000	0.338	0.338	3.05	0.10	2.95	8.70				
13.97	0.634	0.000	0.246	0.246	2.86	0.07	2.80	8.82				330
14.97	0.790	0.000	0.180	0.180	2.73	0.10	2.63	8.84	0.791	0.099	0.148	
15.97	0.853	0.000	0.134	0.134	2.55	0.10	2.45	8.65				
16.97	0.813	0.000	0.099	0.099	2.45	0.06	2.39	8.65				
17.97	0.760	0.000	0.086	0.086	2.45	0.05	2.40	8.55				
18.97	0.720	0.000	0.077	0.077	2.42	0.06	2.36	8.36				
19.97	0.681	0.000	0.071	0.071	2.45	0.06	2.40	8.36				
20.97	0.636	0.000	0.063	0.063	2.50	0.08	2.42	8.36				0
21.97	0.599	0.000	0.057	0.057	2.50	0.11	2.39	8.49				
22.97	0.567	0.000	0.053	0.053	2.50	0.06	2.45	8.39				
23.97	0.539	0.000	0.050	0.050	2.50	0.10	2.40	8.49				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	20.6	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	20.0	0.00	0.00			
5.97		0.01	0.58			
6.97		0.14	8.72			
7.97	21.1	0.37	30.46			
8.97		0.72	72.96			
9.97		0.85	123.70			
10.97	28.3	1.12	190.36			
11.97		1.06	254.08			
12.97		1.22	326.96			
13.97	30.6	1.22	400.16			
14.97		0.98	459.44			
15.97		0.85	510.70			
16.97	31.1	0.31	530.38			
17.97		0.16	540.28			
18.97		0.08	545.24			
19.97	27.8	0.00	545.40			
20.97		0.00	545.40			
21.97		0.00	545.40			
22.97	23.9	0.00	545.40			
23.97		0.00	545.40			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8-13-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.511	0.000	0.047	0.047	2.50	0.08	2.42	8.49				
1.97	0.485	0.000	0.045	0.045	2.56	0.11	2.45	8.49				
2.97	0.462	0.000	0.044	0.044	2.61	0.05	2.56	8.39				
3.97	0.453	0.000	0.042	0.042	2.59	0.09	2.49	8.29				
4.97	0.425	0.000	0.041	0.041	2.54	0.08	2.47	8.19				190
5.97	0.407	0.000	0.039	0.039	2.48	0.10	2.38	9.09				
6.97	0.386	0.000	0.041	0.041	2.40	0.08	2.32	8.09				
7.97	0.364	0.000	0.045	0.045	2.47	0.10	2.37	8.09				
8.97	0.355	0.000	0.048	0.048	2.41	0.07	2.34	8.07	*	0.037	0.010	
9.97	0.372	0.000	0.050	0.050	2.35	0.11	2.25	7.92				
10.97	0.407	0.000	0.047	0.047	2.31	0.07	2.24	7.98				
11.97	0.447	0.000	0.045	0.045	2.15	0.09	2.06	7.85				180
12.97	0.482	0.000	0.044	0.044	2.19	0.08	2.10	7.87				
13.97	0.510	0.000	0.043	0.043	2.09	0.10	1.98	7.79				
14.97	0.520	0.000	0.042	0.042	2.09	0.08	2.01	7.72	0.633	0.008		
15.97	0.515	0.000	0.040	0.040	2.12	0.08	2.04	7.80				
16.97	0.501	0.000	0.036	0.036	2.00	0.11	1.89	7.65				0
17.97	0.479	0.000	0.034	0.034	1.99	0.13	1.87	7.55				
18.97	0.450	0.000	0.030	0.030	1.98	0.14	1.84	7.52				
19.97	0.424	0.000	0.026	0.026	2.03	0.16	1.87	7.44				
20.97	0.399	0.000	0.024	0.024	2.10	0.17	1.93	7.44				0
21.97	0.375	0.000	0.024	0.024	2.10	0.21	1.89	7.37				
22.97	0.353	0.000	0.024	0.024	2.01	0.21	1.80	7.24				
23.97	0.335	0.000	0.021	0.021	2.09	0.30	1.79	7.12				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	18.9	0.00	0.00			
5.97		0.02	1.16			
6.97		0.15	9.90			
7.97	20.6	0.39	32.32			
8.97		0.67	72.46			
9.97		0.93	127.74			
10.97	28.3	1.13	195.14			
11.97		1.23	268.74			
12.97		1.28	345.44			
13.97	31.1	1.25	420.50			
14.97		1.10	486.80			
15.97		0.84	537.72			
16.97	32.2	0.62	575.36			
17.97		0.31	594.58			
18.97		0.09	600.42			
19.97	28.3	0.01	601.18			
20.97		0.00	601.20			
21.97		0.00	601.20			
22.97	22.8	0.00	601.20			
23.97		0.00	601.20			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8-14-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.318	0.000	0.021	0.021	2.14	0.21	1.92	7.15				
1.97	0.301	0.000	0.020	0.020	2.07	0.27	1.80	7.09				
2.97	0.287	0.000	0.020	0.020	2.19	0.18	2.02	7.01				
3.97	0.274	0.000	0.020	0.020	2.10	0.17	1.93	7.06				
4.97	0.265	0.000	0.019	0.019	2.08	0.28	1.80	6.98				130
5.97	0.245	0.000	0.019	0.019	2.08	0.27	1.81	6.95				
6.97	0.227	0.000	0.019	0.019	2.11	0.25	1.86	6.86				
7.97	0.210	0.000	0.024	0.024	2.10	0.25	1.85	6.92				
8.97	0.216	0.000	0.030	0.030	1.94	0.22	1.73	6.91				
9.97	0.245	0.000	0.033	0.033	1.97	0.21	1.76	6.90	0.242	0.011	0.064	
10.97	0.288	0.000	0.033	0.033	1.90	0.30	1.60	6.75				
11.97	0.325	0.000	0.034	0.034	1.89	0.27	1.62	6.52				
12.97	0.355	0.000	0.034	0.034	1.88	0.29	1.59	6.53				
13.97	0.388	0.000	0.033	0.033	1.89	0.38	1.50	6.49	0.470	0.015	0.015	200
14.97	0.405	0.000	0.033	0.033	1.80	0.39	1.41	6.40				
15.97												
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	21.7	0.00	0.00			
5.97		0.01	0.58			
6.97		0.15	9.30			
7.97	22.8	0.30	27.00			
8.97		0.68	67.04			
9.97		0.94	122.92			
10.97	29.4	1.14	190.92			
11.97		1.12	258.16			
12.97		1.23	331.74			
13.97	32.2	1.24	406.12			
14.97		1.08	471.24			
15.97		0.75	516.90			
16.97	32.2	0.50	547.40			
17.97		0.27	564.06			
18.97		0.06	568.08			
19.97	27.8	0.01	568.78			
20.97		0.00	568.80			
21.97		0.00	568.80			
22.97	24.4	0.00	568.80			

% POSSIBLE MINUTES OF SUNSHINE 79

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8-12-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.13 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000	0.66	0.08	0.58	0.00				
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.000	0.000	0.000								
3.13	0.000	0.088	0.021	0.109	1.31	0.09	1.22	9.50				
4.13	0.000	0.089	0.021	0.110	1.67	0.11	1.56	9.40				180
5.13	0.000	0.088	0.020	0.108								
6.13	0.000	0.087	0.022	0.109	1.64	0.11	1.53	9.14				
7.13	0.000	0.072	0.035	0.107	1.77	0.05	1.72					
8.13	0.009	0.025	0.070	0.094	1.38	0.15	1.23	9.93	0.083	0.108	0.040	220
9.13	0.053	0.001	0.086	0.087	1.48	0.15	1.34	10.13				
10.13	0.128	0.000	0.077	0.077	1.47	0.06	1.40	9.71				
11.13	0.238	0.000	0.063	0.063	1.40	0.05	1.34	9.61				
12.13	0.343	0.000	0.051	0.051	1.39	0.10	1.29					
13.13	0.424	0.000	0.043	0.043	1.41	0.06	1.35	9.22				280
14.13	0.458	0.000	0.036	0.036	1.35	0.05	1.30	9.03	0.464	0.025	0.037	
15.13	0.469	0.000	0.033	0.033	1.39	0.10	1.29	8.94				
16.13	0.462	0.000	0.031	0.031	1.31	0.06	1.25	8.84				
17.13	0.445	0.000	0.026	0.026	1.29	0.13	1.16	8.84				
18.13	0.426	0.000	0.021	0.021	1.40	0.12	1.27	8.84				
19.13	0.409	0.000	0.019	0.019								
20.13	0.398	0.000	0.017	0.017	1.37	0.10	1.27	9.09				0
21.13	0.388	0.000	0.014	0.014	1.35	0.16	1.18	9.09				
22.13	0.379	0.000	0.013	0.013	1.27	0.17	1.10	8.99				
23.13	0.373	0.000	0.013	0.013	1.27	0.17	1.10	8.99				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	20.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.0	0.00	0.00			
5.13		0.01	0.08			
6.13		0.14	1.72			
7.13	21.1	0.37	11.96			
8.13		0.72	36.96			
9.13		0.85	81.20			
10.13	28.3	1.12	134.36			
11.13		1.06	201.08			
12.13		1.22	265.96			
13.13	30.6	1.22	339.16			
14.13		0.98	410.44			
15.13		0.85	468.20			
16.13	31.1	0.31	514.88			
17.13		0.16	532.28			
18.13		0.08	541.24			
19.13	27.8	0.00	545.40			
20.13		0.00	545.40			
21.13		0.00	545.40			
22.13	23.9	0.00	545.40			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

CHAMBER NUMBER 4
DAY 2 OF 3 8-13-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.364	0.000	0.013	0.013	1.41	0.17	1.24	8.89				
1.13	0.355	0.000	0.013	0.013	1.38	0.17	1.21	8.89				
2.13	0.347	0.000	0.013	0.013	1.39	0.19	1.20	8.99				
3.13	0.339	0.000	0.012	0.012	1.45	0.16	1.30	8.89				
4.13	0.329	0.000	0.012	0.012	1.44	0.16	1.28	8.79				200
5.13	0.319	0.000	0.011	0.011	1.42	0.12	1.30	8.59				
6.13	0.308	0.000	0.011	0.011	1.38	0.15	1.23	8.49				
7.13	0.296	0.000	0.011	0.011	1.37	0.17	1.20	8.69				
8.13	0.279	0.000	0.013	0.013	1.39	0.18	1.21	8.40	0.311	0.013	0.053	
9.13	0.266	0.000	0.013	0.013	1.43	0.22	1.21	8.37				
10.13	0.259	0.000	0.014	0.014	1.51	0.18	1.33	8.18				
11.13	0.261	0.000	0.014	0.014	1.41	0.19	1.22	8.16				280
12.13	0.270	0.000	0.014	0.014	1.37	0.21	1.17	8.09				
13.13	0.276	0.000	0.014	0.014	1.33	0.22	1.11	7.95				
14.13	0.285	0.000	0.015	0.015	1.39	0.24	1.15	7.73	0.289	0.007		
15.13	0.287	0.000	0.014	0.014	1.37	0.26	1.11	7.78				
16.13	0.283	0.000	0.014	0.014	1.37	0.27	1.10	7.65				0
17.13	0.276	0.000	0.014	0.014	1.38	0.25	1.13	7.63				
18.13	0.265	0.000	0.013	0.013	1.33	0.32	1.01	7.61				
19.13	0.253	0.000	0.012	0.012	1.33	0.26	1.06	7.62				
20.13	0.246	0.000	0.010	0.010	1.42	0.32	1.10	7.52				0
21.13	0.238	0.000	0.009	0.009	1.34	0.32	1.02	7.43				
22.13	0.233	0.000	0.009	0.009	1.43	0.33	1.10	7.51				
23.13	0.227	0.000	0.009	0.009	1.43	0.29	1.14	7.47				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.9	0.00	0.00			
5.13		0.02	0.16			
6.13		0.39	4.32			
7.13	20.6	0.67	29.96			
8.13		0.93	72.24			
9.13		1.13	129.64			
10.13	28.3	1.23	198.24			
11.13		1.28	272.44			
12.13		1.25	349.00			
13.13	31.1	1.10	422.80			
14.13		0.84	486.72			
15.13		0.62	535.36			
16.13	32.2	0.31	570.08			
17.13		0.09	586.92			
18.13		0.01	591.68			
19.13	28.3	0.00	592.20			
20.13		0.00	592.20			
21.13		0.00	592.20			
22.13	22.8	0.00	592.20			
23.13		0.00	592.20			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8-14-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.222	0.000	0.009	0.009	1.48	0.36	1.12	7.39				
1.13	0.216	0.000	0.007	0.007	1.39	0.39	1.00	7.44				
2.13	0.211	0.000	0.007	0.007	1.37	0.35	1.03	7.37				
3.13	0.205	0.000	0.007	0.007	1.44	0.31	1.13	7.32				170
4.13	0.201	0.000	0.007	0.007	1.53	0.37	1.16	7.27				
5.13	0.195	0.000	0.007	0.007	1.46	0.38	1.07	7.23				
6.13	0.191	0.000	0.007	0.007	1.42	0.38	1.04	7.18				
7.13	0.181	0.000	0.007	0.007	1.46	0.44	1.02	7.27				
8.13	0.171	0.000	0.009	0.009	1.44	0.41	1.03	7.21				
9.13	0.163	0.000	0.009	0.009	1.27	0.42	0.85	7.08	0.175	0.007	0.027	
10.13	0.163	0.000	0.010	0.010	1.39	0.40	0.98	6.99				
11.13	0.173	0.000	0.011	0.011	1.48	0.33	1.14	6.84				
12.13	0.186	0.000	0.012	0.012	1.52	0.42	1.09	6.76				
13.13	0.198	0.000	0.012	0.012	1.46	0.44	1.02	6.62	0.287	0.013	0.048	180
14.13	0.215	0.000	0.013	0.013	1.46	0.52	0.93	6.40				
15.13	0.221	0.000	0.012	0.012	1.46	0.52	0.93	6.40				
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												

% POSSIBLE MINUTES OF SUNSHINE 79

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	21.7	0.00	0.00			
5.13		0.01	0.08			
6.13		0.15	1.80			
7.13	22.8	0.30	12.00			
8.13		0.68	33.04			
9.13		0.94	75.92			
10.13	29.4	1.14	133.92			
11.13		1.12	202.16			
12.13		1.73	274.24			
13.13	32.2	1.24	374.12			
14.13		1.08	447.24			
15.13		0.75	509.40			
16.13	32.2	0.50	552.40			
17.13		0.27	580.56			
18.13		0.06	595.08			
19.13	27.8	0.01	598.28			
20.13		0.00	598.80			
21.13		0.00	598.80			
22.13	24.4	0.00	598.80			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8-17-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000								
1.80	0.000	0.000	0.000	0.000								
2.80	0.000	0.000	0.000	0.000								0
3.80	0.000	0.770	0.195	0.965	4.87	1.32	3.54	8.86				
4.80	0.000	0.752	0.209	0.960	4.82	1.30	3.53	8.58				
5.80	0.000	0.741	0.213	0.954								
6.80	0.000	0.661	0.274	0.935	4.87	1.38	3.48	8.54				
7.80	0.000	0.405	0.473	0.878	4.82	1.34	3.48	8.73				
8.80	0.003	0.099	0.701	0.800	4.79	1.37	3.42	8.63	0.099	*	0.182	
9.80	0.139	0.000	0.691	0.691	4.71	1.36	3.35	8.54				
10.80	0.437	0.000	0.549	0.549	4.68	1.35	3.33	8.66				
11.80	0.836	0.000	0.374	0.374	4.66	1.40	3.26	8.75				
12.80	1.188	0.000	0.242	0.242	4.60	1.28	3.32	8.75				
13.80	1.298	0.000	0.184	0.184	4.51	1.39	3.12	8.85	1.384	0.035	0.283	
14.80	1.320	0.000	0.149	0.149	4.42	1.40	3.02	8.85				
15.80	1.322	0.000	0.123	0.123	4.13	1.36	2.77	8.75				
16.80	1.056	0.000	0.091	0.091	3.69	1.30	2.39	8.47				
17.80	0.936	0.000	0.079	0.079	3.40	1.37	2.03	7.60				
18.80	0.816	0.000	0.066	0.066	3.18	1.33	1.85	6.83				
19.80	0.717	0.000	0.058	0.058	2.81	1.34	1.48	6.45				
20.80	0.619	0.000	0.051	0.051	2.64	1.35	1.28	5.58				
21.80	0.535	0.000	0.044	0.044	2.33	1.23	1.10	4.91				0
22.80	0.448	0.000	0.040	0.040	2.16	1.29	0.88	4.43				
23.80	0.375	0.000	0.035	0.035	1.92	1.27	0.65	4.52				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	24.4	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	22.8	0.00	0.00			
5.80		0.00	0.00			
6.80		0.14	6.72			
7.80	23.3	0.37	26.16			
8.80		0.64	61.32			
9.80		0.89	111.72			
10.80	30.0	1.09	174.72			
11.80		1.21	245.88			
12.80		1.26	320.88			
13.80	32.8	1.25	396.00			
14.80		0.81	449.88			
15.80		0.76	496.08			
16.80	32.2	0.25	517.20			
17.80		0.08	524.04	29.73	17.00	
18.80		0.00	525.00			
19.80	24.4	0.00	525.00			
20.80		0.00	525.00			
21.80		0.00	525.00			
22.80	22.2	0.00	525.00			
23.80		0.00	525.00			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 33.9 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8-18-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.321	0.000	0.032	0.032								
1.80	0.268	0.000	0.031	0.031								
2.80	0.226	0.000	0.031	0.031								
3.80	0.190	0.000	0.034	0.034	1.48	0.90	0.58	3.20				
4.80	0.155	0.000	0.037	0.037	1.46	0.98	0.48	2.95				
5.80	0.126	0.000	0.043	0.043	1.28	0.96	0.32	2.64				0
6.80	0.098	0.000	0.050	0.050	1.11	0.95	0.16	2.58				
7.80	0.081	0.000	0.070	0.070				2.41				
8.80	0.137	0.000	0.076	0.076				2.36				350
9.80	0.216	0.000	0.075	0.075					0.156	0.060	0.038	
10.80	0.283	0.000	0.057	0.057								
11.80	0.364	0.000	0.048	0.048								
12.80	0.416	0.000	0.041	0.041								
13.80	0.428	0.000	0.035	0.035								
14.80	0.412	0.000	0.031	0.031					0.477	0.022	0.052	
15.80	0.383	0.000	0.028	0.028								
16.80	0.370	0.000	0.024	0.024								0
17.80	0.351	0.000	0.021	0.021								
18.80	0.332	0.000	0.019	0.019								
19.80	0.301	0.000	0.017	0.017								
20.80	0.276	0.000	0.016	0.016								
21.80	0.257	0.000	0.016	0.016								0
22.80	0.237	0.000	0.016	0.016								
23.80	0.222	0.000	0.015	0.015								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	21.1	0.00	0.00			
5.80		0.01	0.48			
6.80		0.07	3.96			
7.80	21.7	0.14	11.52			
8.80		0.49	36.72			
9.80		0.72	77.16			
10.80	27.8	0.97	132.36			
11.80		1.33	207.84			
12.80		1.34	288.12			
13.80	30.0	1.17	360.36			
14.80		0.98	421.44			
15.80		0.73	468.24			
16.80	31.1	0.48	500.04			
17.80		0.24	517.32	29.73		17.00
18.80		0.05	522.60			
19.80	27.2	0.01	523.68			
20.80		0.00	523.80			
21.80		0.00	523.80			
22.80	22.2	0.00	523.80			
23.80		0.00	523.80			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8-19-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.206	0.000	0.014	0.014								
1.80	0.191	0.000	0.014	0.014								
2.80	0.176	0.000	0.014	0.014								
3.80	0.163	0.000	0.015	0.015								
4.80	0.150	0.000	0.017	0.017								
5.80	0.135	0.000	0.020	0.020								
6.80	0.119	0.000	0.026	0.026								0
7.80	0.108	0.000	0.035	0.035								
8.80	0.108	0.000	0.039	0.039								
9.80	0.132	0.000	0.039	0.039								200
10.80	0.179	0.000	0.037	0.037					0.138	0.032	0.027	
11.80	0.222	0.000	0.033	0.033								
12.80	0.253	0.000	0.032	0.032								
13.80	0.252	0.000	0.030	0.030								
14.80	0.246	0.000	0.027	0.027					0.241	0.016	0.010	
15.80												
16.80												0
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.1	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.0	0.00	0.00			
5.80		0.01	0.48			
6.80		0.11	5.88			
7.80	21.7	0.26	19.68			
8.80		0.30	37.20			
9.80		0.51	65.28			
10.80	26.7	0.79	109.32			
11.80		0.62	148.56			
12.80		0.67	188.16			
13.80	30.0	0.44	217.32			
14.80		0.22	233.16			
15.80		0.20	245.40			
16.80	23.3	0.21	257.88			
17.80		0.13	266.64			
18.80		0.04	270.12			
19.80	22.2	0.00	270.60			
20.80		0.00	270.60			
21.80		0.00	270.60			
22.80	20.6	0.00	270.60			
23.80		0.00	270.60			

% POSSIBLE MINUTES OF SUNSHINE 17

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 8-17-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000								
1.97	0.000	0.000	0.000	0.000								
2.97	0.000	0.000	0.000	0.000								
3.97	0.000	0.185	0.045	0.230	2.68	0.67	2.02	9.89				120
4.97	0.000	0.185	0.045	0.230	3.51	0.64	2.87	9.91				
5.97	0.000	0.182	0.048	0.230	3.10	0.67	2.44	9.80				
6.97	0.000	0.107	0.107	0.214	3.32	0.76	2.57	9.89				
7.97	0.128	0.001	0.183	0.184	2.91	0.69	2.22	9.80				
8.97	0.320	0.000	0.145	0.145	2.86	0.64	2.22	9.80	0.456	0.091	0.093	
9.97	0.544	0.000	0.112	0.112	2.81	0.71	2.10	9.70				
10.97	0.690	0.000	0.096	0.096	2.97	0.73	2.25	9.72				
11.97	0.768	0.000	0.083	0.083	2.82	0.68	2.14	9.81				
12.97	0.811	0.000	0.074	0.074	2.72	0.64	2.08	9.89				
13.97	0.833	0.000	0.064	0.064	2.74	0.66	2.08	9.81	0.915	0.020	0.115	
14.97	0.821	0.000	0.057	0.057	2.57	0.70	1.86	9.91				
15.97	0.785	0.000	0.049	0.049	2.46	0.70	1.76	9.81				
16.97	0.683	0.000	0.037	0.037	2.17	0.70	1.47	9.43				
17.97	0.597	0.000	0.032	0.032	1.94	0.73	1.21	8.18				
18.97	0.527	0.000	0.027	0.027	1.82	0.65	1.17	7.41				
19.97	0.465	0.000	0.022	0.022	1.61	0.63	0.98	6.83				
20.97	0.406	0.000	0.021	0.021	1.33	0.64	0.69	5.87				
21.97	0.348	0.000	0.018	0.018	1.21	0.57	0.64	5.00				0
22.97	0.294	0.000	0.016	0.016	1.11	0.56	0.55	4.71				
23.97	0.251	0.000	0.013	0.013	0.87	0.57	0.31	4.72				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	24.4	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	22.8	0.00	0.00			
5.97		0.00	0.00			
6.97		0.14	8.12			
7.97	23.3	0.37	29.86			
8.97		0.64	67.72			
9.97		0.89	120.62			
10.97	30.0	1.09	185.62			
11.97		1.21	257.98			
12.97		1.26	333.48			
13.97	32.8	1.25	408.50			
14.97		0.81	457.98			
15.97		0.76	503.68			
16.97	32.2	0.25	519.70			
17.97		0.08	524.84	30.02	17.00	
18.97		0.00	525.00			
19.97	24.4	0.00	525.00			
20.97		0.00	525.00			
21.97		0.00	525.00			
22.97	22.2	0.00	525.00			
23.97		0.00	525.00			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 33.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8-18-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.214	0.000	0.012	0.012								
1.97	0.182	0.000	0.011	0.011	0.68	0.41	0.27	3.78				
2.97	0.155	0.000	0.011	0.011	0.64	0.43	0.21	3.50				
3.97	0.132	0.000	0.013	0.013	0.63	0.41	0.22	3.24				
4.97	0.110	0.000	0.014	0.014	0.59	0.39	0.21	2.75				
5.97	0.091	0.000	0.017	0.017	0.54	0.38	0.17	2.62				
6.97	0.074	0.000	0.021	0.021				2.55				0
7.97	0.062	0.000	0.029	0.029				2.46				
8.97	0.091	0.000	0.032	0.032				2.32	0.096	0.027	0.014	
9.97	0.134	0.000	0.028	0.028								
10.97	0.175	0.000	0.025	0.025								
11.97	0.225	0.000	0.022	0.022								
12.97	0.257	0.000	0.021	0.021								
13.97	0.265	0.000	0.019	0.019								
14.97	0.257	0.000	0.017	0.017								
15.97	0.237	0.000	0.016	0.016					0.365	0.024	0.047	
16.97	0.237	0.000	0.013	0.013								0
17.97	0.225	0.000	0.011	0.011								
18.97	0.214	0.000	0.011	0.011								
19.97	0.195	0.000	0.010	0.010								
20.97	0.181	0.000	0.009	0.009								
21.97	0.168	0.000	0.009	0.009								
22.97	0.158	0.000	0.009	0.009								
23.97	0.158	0.000	0.007	0.007								0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	21.1	0.00	0.00			
5.97		0.01	0.58			
6.97		0.07	4.66			
7.97	21.7	0.14	12.92			
8.97		0.49	41.62			
9.97		0.72	84.36			
10.97	27.8	0.97	142.06			
11.97		1.33	221.14			
12.97		1.34	301.52			
13.97	30.0	1.17	372.06			
14.97		0.98	431.24			
15.97		0.73	475.54			
16.97	31.1	0.48	504.84			
17.97		0.24	519.72	30.02		17.00
18.97		0.05	523.10			
19.97	27.2	0.01	523.78			
20.97		0.00	523.80			
21.97		0.00	523.80			
22.97	22.2	0.00	523.80			
23.97		0.00	523.80			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8-19-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.139	0.000	0.007	0.007								
1.97	0.128	0.000	0.009	0.009								
2.97	0.120	0.000	0.009	0.009								
3.97	0.110	0.000	0.009	0.009								
4.97	0.102	0.000	0.010	0.010								
5.97	0.094	0.000	0.011	0.011								
6.97	0.082	0.000	0.014	0.014								
7.97	0.076	0.000	0.019	0.019								0
8.97	0.078	0.000	0.021	0.021								
9.97	0.096	0.000	0.021	0.021								
10.97	0.132	0.000	0.021	0.021								160
11.97	0.158	0.000	0.019	0.019					0.094	0.021	0.018	
12.97	0.182	0.000	0.018	0.018								
13.97	0.181	0.000	0.018	0.018								
14.97	0.174	0.000	0.016	0.016					0.180	0.014	0.004	
15.97												
16.97												
17.97												140
18.97												
19.97												
20.97												
21.97												
22.97												
23.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPH)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.1	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	20.0	0.00	0.00			
5.97		0.01	0.58			
6.97		0.11	6.98			
7.97	21.7	0.26	22.28			
8.97		0.30	40.20			
9.97		0.51	70.38			
10.97	26.7	0.79	117.22			
11.97		0.62	154.76			
12.97		0.67	194.86			
13.97	30.0	0.44	221.72			
14.97		0.22	235.36			
15.97		0.20	247.40			
16.97	23.3	0.21	259.98			
17.97		0.13	267.94			
18.97		0.04	270.52			
19.97	22.2	0.00	270.60			
20.97		0.00	270.60			
21.97		0.00	270.60			
22.97	20.6	0.00	270.60			
23.97		0.00	270.60			

% POSSIBLE MINUTES OF SUNSHINE 16

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8-17-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	VMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.000	0.000	0.000								
3.13	0.000	0.000	0.000	0.000								220
4.13	0.000	0.563	0.128	0.691	2.35	0.28	2.06	9.17				
5.13	0.000	0.551	0.136	0.687	2.71	0.27	2.44	9.05				
6.13	0.000	0.537	0.141	0.678	2.27	0.24	2.05	8.73				
7.13	0.000	0.471	0.197	0.667	2.46	0.32	2.14	8.73				
8.13	0.000	0.312	0.312	0.625	2.23	0.25	1.99	8.92				160
9.13	0.000	0.141	0.438	0.580	2.40	0.33	2.07	9.02	0.034	*	0.048	
10.13	0.034	0.019	0.502	0.521	2.34	0.34	2.01	8.92				
11.13	0.173	0.000	0.466	0.466	2.29	0.31	1.98	8.85				
12.13	0.374	0.000	0.372	0.372	2.36	0.27	2.09	8.85				
13.13	0.615	0.000	0.278	0.278	2.33	0.27	2.06	9.14				
14.13	0.877	0.000	0.193	0.193	2.21	0.22	1.99	9.04	0.760	0.163	0.112	
15.13	0.957	0.000	0.134	0.134	2.07	0.22	1.85	8.92				
16.13	0.941	0.000	0.104	0.104	1.88	0.23	1.65	8.85				
17.13	0.786	0.000	0.072	0.072	1.45	0.26	1.19	7.70				
18.13	0.691	0.000	0.060	0.060	1.28	0.25	1.03	6.93				
19.13	0.604	0.000	0.051	0.051	1.13	0.25	0.90	6.25				
20.13	0.523	0.000	0.043	0.043	0.98	0.26	0.72	5.77				
21.13	0.451	0.000	0.039	0.039	0.77	0.23	0.54	5.00				
22.13	0.385	0.000	0.032	0.032	0.69	0.27	0.42	4.52				0
23.13	0.332	0.000	0.029	0.029	0.52	0.34	0.18	3.75				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	24.4	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	22.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.14	1.12			
7.13	23.3	0.37	11.36			
8.13		0.64	35.72			
9.13		0.89	76.12			
10.13	30.0	1.09	131.12			
11.13		1.21	197.48			
12.13		1.26	270.48			
13.13	32.8	1.25	346.00			
14.13		0.81	417.48			
15.13		0.76	465.68			
16.13	32.2	0.25	507.20	30.02	17.00	
17.13		0.08	520.84			
18.13		0.00	525.00			
19.13	24.4	0.00	525.00			
20.13		0.00	525.00			
21.13		0.00	525.00			
22.13	22.2	0.00	525.00			
23.13		0.00	525.00			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 93.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8-18-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.286	0.000	0.025	0.025	0.49	0.27	0.21	3.89				
1.13	0.246	0.000	0.022	0.022								
2.13	0.214	0.000	0.021	0.021				3.36				
3.13	0.182	0.000	0.021	0.021				3.04				
4.13	0.155	0.000	0.024	0.024				2.77				
5.13	0.133	0.000	0.026	0.026				2.43				
6.13	.111	0.000	0.029	0.029				2.32				130
7.13	0.091	0.000	0.036	0.036				2.19				
8.13	0.083	0.000	0.045	0.045				2.09				640
9.13	0.128	0.000	0.043	0.043				2.09	0.113	0.040	0.023	
10.13	0.176	0.000	0.036	0.036								
11.13	0.219	0.000	0.031	0.031								
12.13	0.267	0.000	0.026	0.026								
13.13	0.289	0.000	0.022	0.022								
14.13	0.288	0.000	0.018	0.018								
15.13	0.273	0.000	0.017	0.017					0.371	0.019	0.037	
16.13	0.253	0.000	0.015	0.015								170
17.13	0.247	0.000	0.013	0.013								
18.13	0.235	0.000	0.012	0.012								
19.13	0.222	0.000	0.011	0.011								
20.13	0.203	0.000	0.009	0.009								
21.13	0.187	0.000	0.019	0.019								
22.13	0.175	0.000	0.019	0.019								0
23.13	0.163	0.000	0.018	0.018								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	21.1	0.00	0.00			
5.13		0.01	0.08			
6.13		0.07	1.16			
7.13	21.7	0.14	5.92			
8.13		0.49	17.12			
9.13		0.72	48.56			
10.13	27.8	0.97	93.56			
11.13		1.33	154.64			
12.13		1.34	234.52			
13.13	30.0	1.17	313.56			
14.13		0.98	382.24			
15.13		0.73	439.04			
16.13	31.1	0.48	480.84			
17.13		0.24	507.72	30.02	17.00	
18.13		0.05	520.60			
19.13	27.2	0.01	523.28			
20.13		0.00	523.80			
21.13		0.00	523.80			
22.13	22.2	0.00	523.80			
23.13		0.00	523.80			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8-19-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.153	0.000	0.018	0.018								
1.13	0.143	0.000	0.018	0.018								
2.13	0.134	0.000	0.018	0.018								
3.13	0.125	0.000	0.019	0.019								
4.13	0.118	0.000	0.019	0.019								
5.13	0.108	0.000	0.011	0.011								
6.13	0.099	0.000	0.012	0.012								170
7.13	0.090	0.000	0.017	0.017								
8.13	0.086	0.000	0.024	0.024								180
9.13	0.091	0.000	0.025	0.025					0.098	0.027	0.033	
10.13	0.114	0.000	0.024	0.024								
11.13	0.153	0.000	0.021	0.021								
12.13	0.194	0.000	0.020	0.020								
13.13	0.191	0.000	0.019	0.019								
14.13	0.191	0.000	0.018	0.018					0.186	0.015	0.010	
15.13	0.178	0.000	0.016	0.016								
16.13												170
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.0	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	21.7	0.26	9.28			
8.13		0.30	25.20			
9.13		0.51	44.88			
10.13	26.7	0.79	77.12			
11.13		0.62	123.76			
12.13		0.67	161.56			
13.13	30.0	0.44	199.72			
14.13		0.22	224.36			
15.13		0.20	237.40			
16.13	23.3	0.21	249.48			
17.13		0.13	261.44			
18.13		0.04	268.52			
19.13	22.2	0.00	270.60			
20.13		0.00	270.60			
21.13		0.00	270.60			
22.13	20.6	0.00	270.60			
23.13		0.00	270.60			

% POSSIBLE MINUTES OF SUNSHINE 16

RDU AIRPORT MAXIMUM TEMPERATURE 86.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8-17-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000								
1.30	0.000	0.000	0.000	0.000								
2.30	0.000	0.000	0.000	0.000								
3.30	0.000	0.003	0.021	0.025	0.80	0.43	0.37	10.28				310
4.30	0.000	0.086	0.019	0.105	0.78	0.38	0.40	10.31				
5.30	0.000	0.086	0.019	0.105	0.69	0.33	0.35	10.36				
6.30	0.000	0.080	0.021	0.102								
7.30	0.000	0.047	0.047	0.094	0.77	0.48	0.30	10.28				
8.30	0.019	0.011	0.075	0.086	0.71	0.45	0.26	10.09				150
9.30	0.088	0.000	0.075	0.075	0.76	0.42	0.34	9.99	*	*	0.024	
10.30	0.195	0.000	0.064	0.064	0.77	0.43	0.34	9.89				
11.30	0.326	0.000	0.060	0.060	0.77	0.41	0.36	9.91				
12.30	0.433	0.000	0.039	0.039	0.76	0.48	0.29	9.81				
13.30	0.493	0.000	0.032	0.032	0.71	0.41	0.30	9.91				
14.30	0.511	0.000	0.027	0.027	0.76	0.49	0.28	9.81	0.526	0.021	0.064	
15.30	0.503	0.000	0.025	0.025	0.73	0.51	0.23	9.62				
16.30	0.471	0.000	0.021	0.021				8.95				
17.30	0.411	0.000	0.014	0.014				8.08				
18.30	0.369	0.000	0.012	0.012				7.22				
19.30	0.334	0.000	0.011	0.011				6.54				
20.30	0.214	0.000	0.010	0.010				5.87				
21.30	0.267	0.000	0.009	0.009				5.00				
22.30	0.233	0.000	0.006	0.006				4.71				0
23.30	0.195	0.000	0.005	0.005				4.39				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	24.4	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	22.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.14	2.52			
7.30	23.3	0.37	15.06			
8.30		0.64	42.12			
9.30		0.89	85.02			
10.30	30.0	1.09	142.02			
11.30		1.21	209.58			
12.30		1.26	283.08			
13.30	32.8	1.25	358.50			
14.30		0.81	425.58			
15.30		0.76	473.28			
16.30	32.2	0.25	509.70			
17.30		0.08	521.64	28.60	17.00	
18.30		0.00	525.00			
19.30	24.4	0.00	525.00			
20.30		0.00	525.00			
21.30		0.00	525.00			
22.30	22.2	0.00	525.00			
23.30		0.00	525.00			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 33.9 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8-18-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.173	0.000	0.005	0.005				4.31				
1.30	0.151	0.000	0.005	0.005				4.18				
2.30	0.130	0.000	0.004	0.004				3.88				
3.30	0.113	0.000	0.004	0.004				3.46				
4.30	0.097	0.000	0.005	0.005				3.20				
5.30	0.084	0.000	0.007	0.007				2.84				
6.30	0.071	0.000	0.009	0.009				2.55				120
7.30	0.061	0.000	0.011	0.011				2.51				
8.30	0.062	0.000	0.014	0.014				2.42				170
9.30	0.079	0.000	0.013	0.013				2.27	0.073	0.015	0.033	
10.30	0.098	0.000	0.012	0.012								
11.30	0.137	0.000	0.011	0.011								
12.30	0.149	0.000	0.011	0.011								
13.30	0.160	0.000	0.009	0.009								
14.30	0.160	0.000	0.009	0.009								
15.30	0.163	0.000	0.007	0.007					0.215	*	0.038	
16.30	0.155	0.000	0.007	0.007								0
17.30	0.150	0.000	0.005	0.005								
18.30	0.144	0.000	0.004	0.004								
19.30	0.137	0.000	0.005	0.005								
20.30	0.127	0.000	0.005	0.005								
21.30	0.116	0.000	0.005	0.005								
22.30	0.108	0.000	0.005	0.005								0
23.30	0.094	0.000	0.003	0.003								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	21.1	0.00	0.00			
5.30		0.01	0.18			
6.30		0.07	1.86			
7.30	21.7	0.14	7.32			
8.30		0.49	22.02			
9.30		0.72	55.56			
10.30	27.8	0.97	103.26			
11.30		1.33	167.94			
12.30		1.34	247.92			
13.30	30.0	1.17	325.26			
14.30		0.98	392.04			
15.30		0.73	446.34			
16.30	31.1	0.48	485.64			
17.30		0.24	510.12	28.60		17.00
18.30		0.05	521.10			
19.30	27.2	0.01	523.38			
20.30		0.00	523.80			
21.30		0.00	523.80			
22.30	22.2	0.00	523.80			
23.30		0.00	523.80			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8-19-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.087	0.000	0.003	0.003								
1.30	0.082	0.000	0.003	0.003								
2.30	0.075	0.000	0.002	0.002								
3.30	0.070	0.000	0.002	0.002								
4.30	0.064	0.000	0.004	0.004								
5.30	0.059	0.000	0.004	0.004								
6.30	0.052	0.000	0.005	0.005								180
7.30	0.047	0.000	0.009	0.009								
8.30	0.047	0.000	0.011	0.011								160
9.30	0.053	0.000	0.011	0.011								
10.30	0.075	0.000	0.011	0.011					0.058	0.014	0.027	
11.30	0.104	0.000	0.011	0.011								
12.30	0.118	0.000	0.011	0.011								
13.30	0.128	0.000	0.011	0.011								
14.30	0.127	0.000	0.010	0.010					0.123	0.009	0.009	
15.30	0.118	0.000	0.009	0.009								
16.30												0
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.11	1.98			
7.30	21.7	0.26	11.28			
8.30		0.30	27.60			
9.30		0.51	49.38			
10.30	26.7	0.79	85.02			
11.30		0.62	129.36			
12.30		0.67	167.46			
13.30	30.0	0.44	203.52			
14.30		0.22	225.96			
15.30		0.20	238.80			
16.30	23.3	0.21	250.98			
17.30		0.13	262.14			
18.30		0.04	268.32			
19.30	22.2	0.00	270.00			
20.30		0.00	270.00			
21.30		0.00	270.00			
22.30	20.6	0.00	270.00			
23.30		0.00	270.00			

% POSSIBLE MINUTES OF SUNSHINE 16

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 8-21-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC ** (PPM)	CH4** (PPM)	NMHC** (PPM)	CO** (PPM)	V8KI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.000	0.000	0.000								
3.13	0.000	0.672	0.000	0.672	4.64	1.70	2.94	8.47				
4.13	0.000	0.732	0.000	0.732	5.10	1.51	3.60	8.23				
5.13	0.000	0.723	0.000	0.723	7.72	1.59	6.13	8.07				
6.13	0.000	0.695	0.000	0.695	7.71	1.58	6.13	7.67				0
7.13	0.000	0.586	0.000	0.586	7.26	1.75	5.52	8.38				
8.13	0.000	0.320	0.000	0.320	6.82	1.69	5.12	8.69				0
9.13	0.011	0.058	0.000	0.058	6.43	1.74	4.69	9.41	0.094	0.670	0.189	
10.13	0.164	0.000	0.000	0.000	5.39	1.73	3.66	8.71				
11.13	0.430	0.000	0.000	0.000	4.88	1.70	3.18	8.43				
12.13	0.727	0.000	0.000	0.000	4.58	1.40	3.18	8.39				
13.13	1.002	0.000	0.000	0.000	4.09	1.56	2.53	8.34				250
14.13	0.998	0.000	0.000	0.000								
15.13	0.965	0.000	0.000	0.000	3.80	1.60	2.20	8.45				
16.13	0.878	0.000	0.000	0.000	3.59	1.57	2.02	8.41				
17.13	0.815	0.000	0.000	0.000	3.37	1.55	1.82	8.11	*	*	0.115	
18.13	0.752	0.000	0.000	0.000	3.23	1.41	1.81	7.73				
19.13	0.694	0.000	0.000	0.000	3.05	1.58	1.47	7.47				
20.13	0.632	0.000	0.000	0.000	2.86	1.51	1.34	7.11				
21.13	0.574	0.000	0.000	0.000	2.75	1.54	1.21	6.66				
22.13	0.521	0.000	0.000	0.000	2.55	1.49	1.06	6.32				0
23.13	0.477	0.000	0.000	0.000	2.48	1.47	1.02	5.96				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	21.1	0.00	0.00			
5.13		0.00	0.00	9.63	5.67	
6.13		0.12	0.96			
7.13	22.2	0.52	9.76			
8.13		0.58	31.04			
9.13		0.81	67.68			
10.13	28.9	1.04	118.12			
11.13		1.17	181.56			
12.13		1.21	252.08			
13.13	30.0	0.99	322.92			
14.13		0.76	380.48			
15.13		0.38	423.04			
16.13	29.4	0.48	446.64			
17.13		0.25	473.60			
18.13		0.06	487.08			
19.13	27.2	0.00	490.20			
20.13		0.00	490.20			
21.13		0.00	490.20			
22.13	21.7	0.00	490.20			
23.13		0.00	490.20			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

*Data suspect and discarded.

**6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8-22-75

URBAN MIX 59% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.433	0.000	0.000	0.000	2.62	1.66	0.96	5.61				
1.13	0.403	0.000	0.000	0.000	2.47	1.52	0.95	5.33				
2.13	0.365	0.000	0.000	0.000				4.90				
3.13	0.335	0.000	0.000	0.000				4.75				
4.13	0.307	0.000	0.000	0.000				4.58				
5.13	0.281	0.000	0.000	0.000				4.25				
6.13	0.262	0.000	0.000	0.000								
7.13	0.238	0.000	0.000	0.000								
8.13	0.227	0.000	0.000	0.000								0
9.13	0.252	0.000	0.000	0.000								
10.13	0.314	0.000	0.000	0.000					0.291	0.025	0.181	0
11.13	0.393	0.000	0.000	0.000								
12.13	0.467	0.003	0.000	0.003								
13.13	0.525	0.005	0.000	0.005								
14.13	0.561	0.006	0.000	0.006								
15.13	0.566	0.006	0.000	0.006								
16.13	0.557	0.004	0.000	0.004					0.515	0.016	0.054	
17.13	0.539	0.004	0.000	0.004								
18.13	0.514	0.005	0.000	0.005								0
19.13	0.493	0.005	0.000	0.005								
20.13	0.471	0.005	0.000	0.005								
21.13	0.444	0.004	0.000	0.004								
22.13	0.415	0.003	0.000	0.003								
23.13	0.387	0.003	0.000	0.003								0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	22.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.6	0.00	0.00			
5.13		0.01	0.08	9.63		5.67
6.13		0.11	1.48			
7.13	21.1	0.32	9.76			
8.13		0.59	31.12			
9.13		0.85	68.60			
10.13	28.9	1.06	121.28			
11.13		1.18	185.84			
12.13		1.22	256.96			
13.13	32.2	1.11	329.28			
14.13		0.89	394.12			
15.13		0.64	445.52			
16.13	33.3	0.52	482.96			
17.13		0.24	511.92			
18.13		0.06	524.88			
19.13	28.9	0.00	528.00			
20.13		0.00	528.00			
21.13		0.00	528.00			
22.13	25.0	0.00	528.00			
23.13		0.00	528.00			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 93.0 CENT

CHAMBER NUMBER 1
DAY 3 OF 3 8-23-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.363	0.003	0.000	0.003								
1.13	0.339	0.003	0.000	0.003								
2.13	0.319	0.002	0.000	0.002								
3.13	0.297	0.002	0.000	0.002								
4.13	0.277	0.002	0.000	0.002								
5.13	0.257	0.001	0.000	0.001								0
6.13	0.238	0.001	0.000	0.001								
7.13	0.215	0.001	0.000	0.001								0
8.13	0.202	0.001	0.000	0.001								
9.13	0.228	0.002	0.000	0.002					0.174	0.020	0.064	
10.13	0.288	0.002	0.000	0.002								
11.13	0.360	0.002	0.000	0.002								
12.13	0.426	0.002	0.000	0.002								
13.13	0.467	0.002	0.000	0.002								
14.13	0.482	0.002	0.000	0.002								
15.13	0.503	0.002	0.000	0.002					*	0.016	0.083	
16.13												0
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	23.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	22.2	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	22.8	0.30	9.60			
8.13		0.55	29.60			
9.13		0.79	64.52			
10.13	30.6	1.00	113.60			
11.13		1.11	174.48			
12.13		0.86	239.08			
13.13	32.2	0.72	289.56			
14.13		0.96	334.68			
15.13		0.72	390.36			
16.13	32.8	0.46	431.48			
17.13		0.22	457.16			
18.13		0.04	468.92			
19.13	27.8	0.00	471.00			
20.13		0.00	471.00			
21.13		0.00	471.00			
22.13	24.4	0.00	471.00			
23.13		0.00	471.00			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 92.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 8-21-75

URBAN MIX 39% DILUTION PAGE 1
TARGET INITIAL HC/NOX= 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC ** (PPM)	CH4 ** (PPM)	NMHC ** (PPM)	CO** (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000								
1.30	0.000	0.000	0.000	0.000								
2.30	0.000	0.000	0.000	0.000								
3.30	0.000	0.183	0.000	0.183								
4.30	0.000	0.181	0.000	0.181	3.11	0.82	2.29	9.89				
5.30	0.000	0.179	0.000	0.179	3.76	1.16	2.61	9.67				
6.30	0.000	0.161	0.000	0.161	3.95	1.08	2.87	9.54				
7.30	0.001	0.066	0.000	0.066	3.69	1.11	2.59	9.19				
8.30	0.145	0.000	0.000	0.000	3.43	1.10	2.33	9.83				150
9.30	0.304	0.000	0.000	0.000	3.63	1.21	2.42	10.27				
10.30	0.482	0.000	0.000	0.000	3.24	1.15	2.10	10.16	0.207	0.208	0.065	120
11.30	0.602	0.000	0.000	0.000	2.89	1.07	1.82	10.08				
12.30	0.655	0.000	0.000	0.000	2.61	1.05	1.56	9.44				
13.30	0.680	0.000	0.000	0.000	2.29	1.15	1.13	9.31				
14.30	0.652	0.000	0.000	0.000				9.33				
15.30	0.625	0.000	0.000	0.000	2.12	1.06	1.05	9.28				110
16.30	0.580	0.000	0.000	0.000	2.02	1.06	0.95	9.14				
17.30	0.543	0.000	0.000	0.000	2.00	1.19	0.81	8.53				
18.30	0.505	0.000	0.000	0.000	1.74	1.00	0.74	8.21	*	0.117	0.027	
19.30	0.468	0.000	0.000	0.000	1.46	0.89	0.57	7.77				
20.30	0.437	0.000	0.000	0.000	1.39	0.85	0.54	7.11				
21.30	0.403	0.000	0.000	0.000	1.46	0.95	0.51	7.00				
22.30	0.371	0.000	0.000	0.000	1.36	0.91	0.45	6.97				
23.30	0.340	0.000	0.000	0.000	1.24	0.84	0.40	6.08				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	21.1	0.00	0.00			
5.30		0.00	0.00			
6.30		0.12	2.16	9.91	5.67	
7.30	22.2	0.32	12.96			
8.30		0.58	36.84			
9.30		0.81	75.78			
10.30	28.9	1.40	135.00			
11.30		1.17	214.86			
12.30		1.21	285.78			
13.30	30.0	0.99	350.42			
14.30		0.76	409.68			
15.30		0.38	448.44			
16.30	29.4	0.48	473.04			
17.30		0.25	497.70			
18.30		0.06	509.28			
19.30	27.2	0.00	511.80			
20.30		0.00	511.80			
21.30		0.00	511.80			
22.30	21.7	0.00	511.80			
23.30		0.00	511.80			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

*Data suspect and discarded.

**6800 data erratic but retained. Shifts due to calibration change.

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8-22-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.310	0.000	0.000	0.000	1.23	0.86	0.37	5.77				
1.30	0.289	0.000	0.000	0.000	1.26	0.95	0.31	5.56				
2.30	0.266	0.000	0.000	0.000	1.24	0.92	0.32	5.31				
3.30	0.245	0.000	0.000	0.000				5.05				
4.30	0.227	0.000	0.000	0.000				4.79				
5.30	0.209	0.000	0.000	0.000				4.39				
6.30	0.194	0.000	0.000	0.000								140
7.30	0.180	0.000	0.000	0.000								
8.30	0.170	0.000	0.000	0.000								120
9.30	0.163	0.000	0.000	0.000					0.202	0.013	0.067	
10.30	0.217	0.000	0.000	0.000								
11.30	0.264	0.000	0.000	0.000								
12.30	0.313	0.003	0.000	0.003								
13.30	0.353	0.004	0.000	0.004								
14.30	0.379	0.006	0.000	0.006								
15.30	0.385	0.006	0.000	0.006					0.376	0.015	0.060	
16.30	0.384	0.005	0.000	0.005								110
17.30	0.372	0.004	0.000	0.004								
18.30	0.356	0.005	0.000	0.005								
19.30	0.342	0.005	0.000	0.005								
20.30	0.329	0.004	0.000	0.004								
21.30	0.320	0.003	0.000	0.003								
22.30	0.307	0.003	0.000	0.003								0
23.30	0.293	0.003	0.000	0.003								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	22.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.6	0.00	0.00			
5.30		0.01	0.18	9.91		5.67
6.30		0.32	6.36			
7.30	21.1	0.59	30.42			
8.30		0.85	70.50			
9.30		1.06	125.28			
10.30	28.9	1.18	191.04			
11.30		1.22	262.56			
12.30		1.11	333.78			
13.30	32.2	0.81	394.98			
14.30		0.64	440.52			
15.30		0.52	476.76			
16.30	33.3	0.24	502.92			
17.30		0.06	514.08			
18.30		0.00	516.60			
19.30	28.9	0.00	516.60			
20.30		0.00	516.60			
21.30		0.00	516.60			
22.30	25.0	0.00	516.60			
23.30		0.00	516.60			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 93.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8-23-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.278	0.003	0.000	0.003								
1.30	0.264	0.003	0.000	0.003								
2.30	0.249	0.002	0.000	0.002								
3.30	0.236	0.002	0.000	0.002								
4.30	0.224	0.002	0.000	0.002								
5.30	0.212	0.001	0.000	0.001								
6.30	0.198	0.001	0.000	0.001								
7.30	0.182	0.001	0.000	0.001								
8.30	0.171	0.001	0.000	0.001								0
9.30	0.180	0.002	0.000	0.002								130
10.30	0.207	0.002	0.000	0.002					0.159	0.009	0.045	
11.30	0.249	0.002	0.000	0.002								
12.30	0.289	0.002	0.000	0.002								
13.30	0.312	0.002	0.000	0.002								
14.30	0.330	0.002	0.000	0.002								
15.30	0.344	0.002	0.000	0.002								
16.30												
17.30									*	0.026	0.002	
18.30												120
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	23.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	22.2	0.00	0.00			
5.30		0.01	0.18			
6.30		0.11	2.58			
7.30	22.8	0.30	12.60			
8.30		0.55	35.10			
9.30		0.79	72.42			
10.30	30.6	1.00	123.60			
11.30		1.11	185.58			
12.30		0.86	247.68			
13.30	32.2	0.72	296.76			
14.30		0.96	344.28			
15.30		0.72	397.56			
16.30	32.8	0.46	436.08			
17.30		0.22	459.36			
18.30		0.04	469.32			
19.30	27.8	0.00	471.00			
20.30		0.00	471.00			
21.30		0.00	471.00			
22.30	24.4	0.00	471.00			
23.30		0.00	471.00			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 92.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8-21-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.000	0.000	0.000								
2.47	0.000	0.000	0.000	0.000				9.12				
3.47	0.000	0.547	0.122	0.668			1.81	9.17				
4.47	0.000	0.538	0.129	0.667	2.40	0.58	2.13	8.47				210
5.47	0.000	0.526	0.132	0.658	2.74	0.61	2.21	8.45				
6.47	0.000	0.489	0.138	0.627	2.80	0.59	1.59	8.71				260
7.47	0.000	0.406	0.184	0.590	2.29	0.70	1.85	9.54				
8.47	0.000	0.255	0.292	0.547	2.49	0.64	1.92	8.99	0.051	0.414	0.060	
9.47	0.001	0.096	0.385	0.481	2.68	0.75	1.77	8.86				
10.47	0.046	0.010	0.417	0.427	2.38	0.61	1.80	8.58				
11.47	0.178	0.000	0.360	0.360	2.26	0.46	1.60	8.61				
12.47	0.325	0.000	0.291	0.291	2.10	0.50	1.43	8.28				150
13.47	0.467	0.000	0.224	0.224	2.02	0.59	1.16	7.81				
14.47	0.554	0.000	0.168	0.168	1.73	0.57	1.17	8.19				
15.47	0.599	0.000	0.122	0.122	1.64	0.47						
16.47	0.581	0.000	0.090	0.090			0.93	7.84	*	0.093	0.053	
17.47	0.557	0.000	0.074	0.074	1.24	0.31	0.42	7.18				
18.47	0.511	0.000	0.057	0.057	0.99	0.57	0.28	6.86				
19.47	0.467	0.000	0.047	0.047	0.83	0.55	0.18	6.67				
20.47	0.430	0.000	0.043	0.043	0.77	0.59						
21.47	0.393	0.000	0.037	0.037								0
22.47	0.357	0.000	0.034	0.034	0.82	0.56	0.26	6.15				
23.47	0.324	0.000	0.031	0.031	0.92	0.54	0.38	5.58				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	21.1	0.00	0.00			
5.47		0.00	0.00	9.63	5.67	
6.47		0.12	3.36			
7.47	22.2	0.32	16.16			
8.47		0.58	42.64			
9.47		0.81	83.88			
10.47	28.9	1.04	138.92			
11.47		1.17	204.96			
12.47		1.21	276.28			
13.47	30.0	0.99	342.72			
14.47		0.76	395.68			
15.47		0.38	430.64			
16.47	29.4	0.48	456.24			
17.47		0.25	478.60			
18.47		0.06	488.28			
19.47	27.2	0.00	490.20			
20.47		0.00	490.20			
21.47		0.00	490.20			
22.47	21.7	0.00	490.20			
23.47		0.00	490.20			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

*Data suspect and discarded.

**6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8-22-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.301	0.000	0.030	0.030	0.87	0.62	0.25	5.31				
1.47	0.277	0.000	0.029	0.029	0.91	0.60	0.31	5.09				
2.47	0.257	0.000	0.027	0.027				4.83				
3.47	0.237	0.000	0.025	0.025				4.60				
4.47	0.218	0.000	0.024	0.024				4.52				
5.47	0.202	0.000	0.024	0.024				4.19				
6.47	0.188	0.000	0.025	0.025								
7.47	0.174	0.000	0.029	0.029								210
8.47	0.179	0.000	0.032	0.032								
9.47	0.214	0.000	0.032	0.032								160
10.47	0.274	0.000	0.032	0.032					0.219	0.019	0.101	
11.47	0.337	0.001	0.033	0.034								
12.47	0.391	0.004	0.033	0.037								
13.47	0.430	0.005	0.031	0.036								
14.47	0.449	0.006	0.030	0.036								
15.47	0.448	0.006	0.028	0.034								
16.47	0.438	0.004	0.025	0.029					0.385	0.019	0.055	
17.47	0.422	0.004	0.022	0.027								110
18.47	0.404	0.005	0.020	0.026								
19.47	0.385	0.005	0.018	0.024								
20.47	0.368	0.004	0.014	0.018								
21.47	0.350	0.003	0.014	0.017								
22.47	0.328	0.003	0.013	0.016								
23.47	0.309	0.003	0.012	0.015								0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.6	0.00	0.00			
5.47		0.01	0.28	9.63		5.67
6.47		0.11	3.68			
7.47	21.1	0.32	16.16			
8.47		0.59	42.92			
9.47		0.85	85.60			
10.47	28.9	1.06	142.48			
11.47		1.18	209.44			
12.47		1.22	281.36			
13.47	32.2	1.11	351.48			
14.47		0.81	409.68			
15.47		0.64	453.52			
16.47	33.3	0.52	488.56			
17.47		0.24	511.92			
18.47		0.06	521.28			
19.47	28.9	0.00	523.20			
20.47		0.00	523.20			
21.47		0.00	523.20			
22.47	25.0	0.00	523.20			
23.47		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 33.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8-23-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.291	0.003	0.012	0.015								
1.47	0.276	0.003	0.012	0.015								
2.47	0.260	0.002	0.012	0.014								
3.47	0.247	0.002	0.012	0.014								
4.47	0.234	0.002	0.013	0.015								
5.47	0.221	0.001	0.013	0.014								
6.47	0.207	0.001	0.017	0.018								170
7.47	0.190	0.001	0.022	0.024								
8.47	0.185	0.002	0.026	0.028								140
9.47	0.207	0.002	0.027	0.029					0.163	0.014	0.068	
10.47	0.250	0.002	0.028	0.030								
11.47	0.301	0.002	0.028	0.030								
12.47	0.342	0.002	0.026	0.028								
13.47	0.361	0.002	0.024	0.026								
14.47	0.378	0.002	0.024	0.026								
15.47	0.385	0.002	0.022	0.025					*	*	0.017	
16.47												100
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	23.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	22.2	0.00	0.00			
5.47		0.01	0.28			
6.47		0.11	3.68			
7.47	22.8	0.30	15.60			
8.47		0.55	40.60			
9.47		0.79	80.32			
10.47	30.6	1.00	133.60			
11.47		1.11	196.68			
12.47		0.86	256.28			
13.47	32.2	0.72	303.96			
14.47		0.96	353.88			
15.47		0.72	404.76			
16.47	32.8	0.46	440.68			
17.47		0.22	461.56			
18.47		0.04	469.72			
19.47	27.8	0.00	471.00			
20.47		0.00	471.00			
21.47		0.00	471.00			
22.47	24.4	0.00	471.00			
23.47		0.00	471.00			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8-21-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC*** (PPM)	CH4*** (PPM)	NMHC*** (PPM)	CO** (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.000	0.000	0.000								
3.63	0.000	0.084	0.017	0.102				10.07				
4.63	0.000	0.083	0.018	0.102				9.89				
5.63	0.000	0.082	0.018	0.101				9.76				
6.63	0.000	0.068	0.024	0.092				9.47				170
7.63	0.002	0.026	0.059	0.084				9.61				
8.63	0.046	0.001	0.075	0.076				10.24				
9.63	0.113	0.000	0.064	0.064				10.37	0.054	0.113	0.032	200
10.63	0.203	0.000	0.052	0.052				9.95				
11.63	0.307	0.000	0.040	0.040				9.35				
12.63	0.381	0.000	0.032	0.032				9.19				
13.63	0.407	0.000	0.027	0.027				8.84				180
14.63	0.406	0.000	0.024	0.024				8.70				
15.63	0.391	0.000	0.020	0.020				7.67				
16.63	0.369	0.000	0.019	0.019				7.58				
17.63	0.350	0.000	0.017	0.017				7.21	*	0.037	0.055	
18.63	0.328	0.000	0.013	0.013				7.98				
19.63	0.306	0.000	0.010	0.010				7.71				
20.63	0.286	0.000	0.009	0.009				6.67				
21.63	0.264	0.000	0.007	0.007				6.67				
22.63	0.246	0.000	0.006	0.006				6.32				0
23.63	0.227	0.000	0.006	0.006				6.18				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	21.1	0.00	0.00			
5.63		0.00	0.00	9.06	5.67	
6.63		0.12	4.56			
7.63	22.2	0.32	19.36			
8.63		0.58	48.44			
9.63		0.81	91.98			
10.63	28.9	1.04	149.32			
11.63		1.17	216.66			
12.63		1.21	288.38			
13.63	30.0	0.99	352.62			
14.63		0.76	403.28			
15.63		0.38	434.44			
16.63	29.4	0.48	461.04			
17.63		0.25	481.10			
18.63		0.06	488.88			
19.63	27.2	0.00	490.20			
20.63		0.00	490.20			
21.63		0.00	490.20			
22.63	21.7	0.00	490.20			
23.63		0.00	490.20			

% POSSIBLE MINUTES OF SUNSHINE 72

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

*Data suspect and discarded.

**CO data erratic but retained. Shifts due to calibration changes.

***THC, CH_4 and NMHC data discarded due to excessive calibration er...

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8-22-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.212	0.000	0.005	0.005				6.03				
1.63	0.198	0.000	0.005	0.005				5.63				
2.63	0.184	0.000	0.005	0.005				5.51				
3.63	0.171	0.000	0.005	0.005				5.16				
4.63	0.160	0.000	0.005	0.005				4.95				
5.63	0.150	0.000	0.004	0.004				4.60				150
6.63	0.140	0.000	0.005	0.005								
7.63	0.130	0.000	0.007	0.007								
8.63	0.127	0.000	0.009	0.009								220
9.63	0.139	0.000	0.011	0.011					0.141	0.016	0.053	
10.63	0.163	0.000	0.011	0.011								
11.63	0.190	0.002	0.012	0.014								
12.63	0.214	0.004	0.012	0.016								
13.63	0.233	0.006	0.011	0.017								
14.63	0.241	0.006	0.011	0.017					0.223	0.014	0.029	
15.63	0.240	0.006	0.010	0.016								180
16.63	0.235	0.003	0.009	0.012								
17.63	0.227	0.004	0.007	0.012								
18.63	0.216	0.005	0.006	0.012								
19.63	0.206	0.005	0.004	0.010								
20.63	0.196	0.004	0.004	0.009								
21.63	0.186	0.003	0.003	0.006								110
22.63	0.174	0.003	0.003	0.006								
23.63	0.164	0.003	0.003	0.006								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	22.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.6	0.00	0.00			
5.63		0.01	0.38	9.06		5.67
6.63		0.11	4.78			
7.63	21.1	0.32	19.36			
8.63		0.59	48.82			
9.63		0.85	94.10			
10.63	28.9	1.06	153.08			
11.63		1.18	221.24			
12.63		1.22	293.56			
13.63	32.2	1.11	362.58			
14.63		0.81	417.78			
15.63		0.64	459.92			
16.63	33.3	0.52	493.76			
17.63		0.24	514.32			
18.63		0.06	521.88			
19.63	28.9	0.00	523.20			
20.63		0.00	523.20			
21.63		0.00	523.20			
22.63	25.0	0.00	523.20			
23.63		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 33.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8-23-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.156	0.003	0.003	0.006								
1.63	0.147	0.003	0.003	0.006								
2.63	0.138	0.002	0.002	0.004								
3.63	0.128	0.002	0.003	0.005								
4.63	0.120	0.002	0.004	0.006								190
5.63	0.113	0.001	0.004	0.005								
6.63	0.105	0.001	0.007	0.009								
7.63	0.096	0.001	0.010	0.011					0.075	0.010	0.036	
8.63	0.089	0.002	0.011	0.013								
9.63	0.121	0.002	0.012	0.014								
10.63	0.154	0.002	0.012	0.014								
11.63	0.185	0.002	0.011	0.013								
12.63	0.210	0.002	0.010	0.012								
13.63	0.222	0.002	0.009	0.011								
14.63	0.230	0.002	0.009	0.011					*	0.031	0.023	100
15.63	0.233	0.002	0.007	0.010								
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	23.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	22.2	0.00	0.00			
5.63		0.01	0.38			
6.63		0.11	4.78			
7.63	22.8	0.30	18.60			
8.63		0.55	46.10			
9.63		0.79	88.22			
10.63	30.6	1.00	143.60			
11.63		1.11	207.78			
12.63		0.86	264.88			
13.63	32.2	0.72	311.16			
14.63		0.96	363.48			
15.63		0.72	411.96			
16.63	32.8	0.46	445.28			
17.63		0.22	463.76			
18.63		0.04	470.12			
19.63	27.8	0.00	471.00			
20.63		0.00	471.00			
21.63		0.00	471.00			
22.63	24.4	0.00	471.00			
23.63		0.00	471.00			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 33.3 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8-27-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.007	0.004	0.012								
3.13	0.000	0.773	0.234	1.007	6.17	1.28	4.89	8.73				
4.13	0.000	0.804	0.227	1.031	6.17	1.28	4.89	7.79				
5.13	0.000	0.784	0.232	1.016	6.17	1.26	4.92	7.79				0
6.13	0.000	0.770	0.249	1.019	6.26	1.23	5.03	7.79				
7.13	0.000	0.660	0.353	1.013	6.04	1.19	4.85	7.79				
8.13	0.000	0.490	0.494	0.984	6.04	1.26	4.78	7.70				
9.13	0.000	0.386	0.570	0.956	5.70	1.19	4.51	7.70		0.736	0.143	
10.13	0.000	0.180	0.733	0.912	5.36	1.24	4.12	7.70				
11.13	0.078	0.014	0.794	0.807	5.25	1.20	4.05	8.24				
12.13	0.334	0.006	0.642	0.648	5.14	1.20	3.94	8.32				0
13.13	0.680	0.006	0.460	0.466	5.04	1.25	3.79	8.45	1.073	0.186	0.229	
14.13	0.971	0.006	0.298	0.305	4.94	1.25	3.69	8.35				0
15.13	1.066	0.007	0.220	0.228	4.01	1.20	2.82	8.44				
16.13	1.027	0.009	0.185	0.194	3.86	1.25	2.61	8.42				
17.13	0.965	0.009	0.161	0.170	3.63	1.28	2.35	8.19				
18.13	0.899	0.007	0.140	0.148	3.52	1.25	2.27	8.19				
19.13	0.837	0.007	0.126	0.134	3.43	1.26	2.17	7.86				
20.13	0.784	0.007	0.112	0.120	3.40	1.23	2.17	7.97				
21.13	0.721	0.007	0.101	0.108	3.08	1.18	1.90	7.66				0
22.13	0.675	0.006	0.095	0.102	3.34	1.21	2.13	7.47				
23.13	0.628	0.005	0.086	0.091	3.37	1.14	2.23	7.37				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	24.4	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	22.8	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	22.8	0.17	8.56			
8.13		0.08	18.04			
9.13		0.27	24.36			
10.13	24.4	0.69	43.92	9.63	10.25	
11.13		1.15	89.00			
12.13		1.19	158.52			
13.13	30.6	1.11	229.08			
14.13		0.99	294.72			
15.13		0.77	352.36			
16.13	30.0	0.47	396.16			
17.13		0.23	422.44			
18.13		0.06	434.88			
19.13	26.7	0.00	438.00			
20.13		0.00	438.00			
21.13		0.00	438.00			
22.13	22.8	0.00	438.00			
23.13		0.00	438.00			

% POSSIBLE MINUTES OF SUNSHINE 62

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

* 0800 data erratic but retained shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8-28-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.589	0.004	0.082	0.087	5.44	1.20	2.24	7.46				
1.13	0.550	0.003	0.078	0.081	3.28	1.13	2.15	7.15				
2.13	0.517	0.003	0.075	0.078	3.30	1.10	2.19	7.00				
3.13	0.486	0.002	0.074	0.076	3.84	1.27	2.57	8.46				
4.13	0.455	0.002	0.073	0.075	3.82	1.28	2.54	8.19				
5.13	0.428	0.002	0.073	0.075	3.79	1.28	2.51	7.88				0
6.13	0.406	0.001	0.073	0.074	3.83	1.29	2.54	7.56				
7.13	0.375	0.002	0.077	0.079	3.76	1.24	2.52	7.61				
8.13	0.356	0.002	0.079	0.081	**	**	**	**	0.388	0.020	0.231	
9.13	0.366	0.002	0.082	0.084	**	**	**	**				
10.13	0.405	0.003	0.083	0.087	**	**	**	**				
11.13	0.468	0.004	0.083	0.088	**	**	**	**				
12.13	0.527	0.004	0.079	0.083	**	**	**	**				
13.13	0.580	0.006	0.077	0.083	**	**	**	**	0.634	0.020	0.159	
14.13	0.609	0.007	0.077	0.084	**	**	**	**				
15.13	0.619	0.009	0.072	0.080	**	**	**	**				
16.13	0.613	0.010	0.071	0.080	2.99	1.31	1.68	8.35				
17.13	0.590	0.011	0.065	0.076	3.03	1.26	1.78	8.18				
18.13	0.565	0.012	0.061	0.073	2.98	1.27	1.70	8.25				
19.13	0.527	0.012	0.053	0.065	2.93	1.29	1.64	8.17				
20.13	0.493	0.011	0.049	0.060	2.96	1.30	1.66	8.20				
21.13	0.463	0.009	0.046	0.055	3.07	1.24	1.83	8.01				
22.13	0.445	0.007	0.044	0.051	3.07	1.26	1.81	7.82				
23.13	0.426	0.006	0.042	0.048	3.06	1.28	1.77	7.69				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.9	0.00	0.00			
5.13		0.02	0.16			
6.13		0.13	2.24			
7.13	19.4	0.39	12.12			
8.13		0.60	37.20			
9.13		0.90	75.60			
10.13	27.8	1.15	131.60	9.63		10.25
11.13		1.24	201.52			
12.13		1.25	275.80			
13.13	30.6	1.16	350.08			
14.13		1.02	418.56			
15.13		0.80	478.00			
16.13	31.1	0.54	523.92			
17.13		0.24	553.92			
18.13		0.06	566.88			
19.13	24.4	0.00	570.00			
20.13		0.00	570.00			
21.13		0.00	570.00			
22.13	20.6	0.00	570.00			
23.13		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

* 6800 data erratic but retained shifts due to calibration changes.

** Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8-29-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO * (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.406	0.004	0.041	0.045	3.01	1.20	1.81	7.40				
1.13	0.390	0.003	0.040	0.043	2.98	1.24	1.74	7.24				
2.13	0.375	0.002	0.039	0.041	2.90	1.22	1.68	6.85				
3.13	0.361	0.002	0.036	0.039	2.86	1.23	1.63	6.68				
4.13	0.350	0.001	0.035	0.036	2.86	1.22	1.64	6.34				0
5.13	0.335	0.001	0.035	0.036	2.77	1.19	1.58	5.96				
6.13	0.322	0.000	0.035	0.035	3.25	1.38	1.87	7.93				
7.13	0.309	0.000	0.036	0.036	3.09	1.41	1.68	7.79				
8.13	0.292	0.001	0.042	0.043	2.62	1.33	1.28	7.00	0.322	0.001	0.077	
9.13	0.288	0.002	0.046	0.048	2.27	1.36	0.92	6.69				
10.13	0.299	0.002	0.050	0.052	2.36	1.35	1.02	6.09				
11.13	0.324	0.003	0.055	0.058	2.03	1.34	0.69	5.82				
12.13	0.364	0.004	0.057	0.061	1.94	1.22	0.72	5.49				
13.13	0.403	0.006	0.058	0.064					0.414	0.018	0.109	
14.13	0.434	0.006	0.059	0.065								
15.13	0.451	0.011	0.061	0.072								0
16.13	0.457	0.013	0.061	0.074								
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	17.2	0.00	0.00			
5.13		0.01	0.08			
6.13		0.12	1.56			
7.13	18.9	0.38	10.84			
8.13		0.61	35.48			
9.13		0.92	74.56			
10.13	26.1	1.10	131.20			
11.13		1.23	198.24			
12.13		1.25	272.20			
13.13	29.4	1.16	346.48			
14.13		1.03	415.04			
15.13		0.82	475.16			
16.13	31.1	0.54	522.12			
17.13		0.26	552.28			
18.13		0.05	566.20			
19.13	25.0	0.00	568.80			
20.13		0.00	568.80			
21.13		0.00	568.80			
22.13	21.1	0.00	568.80			
23.13		0.00	568.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

* 6800 data erratic but retained shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207 PAGE 1

CHAMBER NUMBER 2
DAY 1 OF 3 8-27-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000								
1.30	0.000	0.000	0.000	0.000								
2.30	0.000	0.007	0.002	0.010	1.28	1.26	0.02	9.04				
3.30	0.000	0.206	0.055	0.261	3.40	1.19	2.21	9.04				0
4.30	0.000	0.203	0.058	0.261	3.62	1.20	2.42	8.85				
5.30	0.000	0.202	0.056	0.258	3.79	1.20	2.60	8.95				
6.30	0.000	0.191	0.067	0.259	3.62	1.19	2.43	8.85				
7.30	0.000	0.087	0.166	0.252	3.18	1.13	2.05	8.75				
8.30	0.043	0.006	0.217	0.224	3.39	1.11	2.28	8.47	0.173	0.182	0.053	
9.30	0.093	0.004	0.184	0.188	3.18	1.15	2.03	7.89				
10.30	0.201	0.003	0.154	0.157	2.94	1.11	1.83	8.42				0
11.30	0.387	0.003	0.120	0.123	2.92	1.14	1.78	8.36				
12.30	0.540	0.003	0.099	0.103	2.61	1.03	1.58	8.07	0.777	0.042	0.070	0
13.30	0.606	0.004	0.088	0.092	2.49	0.64	1.85	7.80				
14.30	0.631	0.005	0.078	0.083	2.05	1.04	1.01	7.69				
15.30	0.627	0.006	0.072	0.078	1.98	1.00	0.98	7.39				
16.30	0.599	0.007	0.064	0.072	1.80	0.97	0.82	7.04				
17.30	0.559	0.007	0.056	0.063	1.68	0.94	0.74	6.73				
18.30	0.521	0.007	0.046	0.053	1.57	0.93	0.64	6.51				
19.30	0.481	0.006	0.040	0.046	1.49	0.89	0.60	6.33				0
20.30	0.449	0.006	0.036	0.043	1.36	0.88	0.49	5.93				
21.30	0.419	0.006	0.034	0.041	1.32	0.81	0.51	5.73				
22.30	0.389	0.005	0.030	0.035	1.27	0.76	0.51	5.41				
23.30	0.355	0.004	0.026	0.030								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	24.4	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	22.8	0.00	0.00			
5.30		0.01	0.18			
6.30		0.11	2.58			
7.30	22.8	0.17	10.26	9.91	7.17	
8.30		0.08	18.84			
9.30		0.27	27.06			
10.30	24.4	0.69	50.82			
11.30		1.15	100.50			
12.30		1.19	170.22			
13.30	30.6	1.11	240.18			
14.30		0.99	304.62			
15.30		0.77	360.06			
16.30	30.0	0.47	400.86			
17.30		0.23	424.74			
18.30		0.06	435.48			
19.30	26.7	0.00	438.00			
20.30		0.00	438.00			
21.30		0.00	438.00			
22.30	22.8	0.00	438.00			
23.30		0.00	438.00			

% POSSIBLE MINUTES OF SUNSHINE 62

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8-28-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.327	0.004	0.025	0.029	1.24	0.70	0.54	5.23				
1.30	0.299	0.003	0.022	0.026	1.21	0.72	0.49	4.99				
2.30	0.278	0.003	0.021	0.025	1.23	0.64	0.58	4.59				
3.30	0.256	0.002	0.020	0.022	1.30	0.81	0.49	5.75				
4.30	0.233	0.002	0.019	0.021	1.34	0.71	0.62	5.31				
5.30	0.216	0.002	0.019	0.021	1.32	0.74	0.58	4.96				170
6.30	0.201	0.001	0.019	0.020	1.23	0.67	0.57	4.72				
7.30	0.182	0.002	0.021	0.024	1.58	0.73	0.84	4.82				
8.30	0.173	0.002	0.024	0.026					0.194	0.013	0.053	
9.30	0.180	0.002	0.027	0.029								
10.30	0.203	0.003	0.029	0.032								
11.30	0.243	0.004	0.030	0.034								
12.30	0.279	0.004	0.031	0.035								
13.30	0.314	0.006	0.032	0.039					0.355	0.015	0.030	
14.30	0.339	0.007	0.032	0.040								
15.30	0.353	0.009	0.031	0.040								
16.30	0.355	0.010	0.031	0.041	1.39	0.83	0.55	6.79				
17.30	0.347	0.011	0.030	0.041	1.28	0.85	0.43	6.58				
18.30	0.333	0.012	0.029	0.041	1.17	0.86	0.32	6.56				
19.30	0.317	0.011	0.024	0.034	1.03	0.80	0.23	6.53				
20.30	0.298	0.011	0.020	0.031	1.16	0.77	0.39	6.51				
21.30	0.286	0.009	0.019	0.028	1.23	0.88	0.35	6.42				
22.30	0.274	0.007	0.018	0.026	1.31	0.89	0.41	6.27				
23.30	0.264	0.005	0.017	0.022	1.31	0.83	0.48	6.17				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	18.9	0.00	0.00			
5.30		0.02	0.36			
6.30		0.13	3.54			
7.30	19.4	0.39	16.02	9.91		7.17
8.30		0.60	43.20			
9.30		0.90	84.60			
10.30	27.8	1.15	143.10			
11.30		1.24	213.72			
12.30		1.25	288.30			
13.30	30.6	1.16	361.68			
14.30		1.02	428.76			
15.30		0.80	486.00			
16.30	31.1	0.54	529.32			
17.30		0.24	556.32			
18.30		0.06	567.48			
19.30	24.4	0.00	570.00			
20.30		0.00	570.00			
21.30		0.00	570.00			
22.30	20.6	0.00	570.00			
23.30		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8-29-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.253	0.004	0.016	0.020	1.31	0.80	0.51	6.04				
1.30	0.245	0.003	0.015	0.018	1.36	0.79	0.57	5.85				
2.30	0.236	0.002	0.015	0.017	1.24	0.86	0.39	5.66				
3.30	0.228	0.002	0.014	0.016	1.25	0.83	0.42	5.54				
4.30	0.222	0.001	0.014	0.015	1.18	0.82	0.36	5.21				
5.30	0.214	0.001	0.014	0.015	1.20	0.86	0.35	4.95				
6.30	0.206	0.000	0.014	0.014	1.16	0.84	0.32	4.71				120
7.30	0.195	0.000	0.015	0.015	1.14	0.82	0.32	4.90				
8.30	0.184	0.001	0.018	0.019					0.212	0.00c	0.025	
9.30	0.182	0.002	0.021	0.024								
10.30	0.194	0.002	0.022	0.025								
11.30	0.215	0.003	0.025	0.028								
12.30	0.245	0.004	0.027	0.031								
13.30	0.271	0.006	0.029	0.035					0.300	0.015	0.040	
14.30	0.296	0.007	0.028	0.035								
15.30	0.310	0.011	0.030	0.041								
16.30	0.309	0.013	0.030	0.043								
17.30												0
18.30												
19.30												
20.30												
21.30												
22.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	17.2	0.00	0.00			
5.30		0.01	0.18			
6.30		0.12	2.76			
7.30	18.9	0.38	14.64			
8.30		0.61	41.58			
9.30		0.92	83.76			
10.30	26.1	1.10	142.20			
11.30		1.23	210.54			
12.30		1.25	284.70			
13.30	29.4	1.16	358.08			
14.30		1.03	425.34			
15.30		0.82	483.36			
16.30	31.1	0.54	527.52			
17.30		0.26	554.88			
18.30		0.05	566.70			
19.30	25.0	0.00	568.80			
20.30		0.00	568.80			
21.30		0.00	568.80			
22.30	21.1	0.00	568.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8-27-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.000	0.000	0.000								
2.47	0.000	0.007	0.002	0.010								
3.47	0.000	0.602	0.143	0.745	0.40	0.36	0.03	9.18				
4.47	0.000	0.586	0.155	0.741	2.52	0.35	2.16	8.37				
5.47	0.000	0.580	0.153	0.733	2.73	0.29	2.44	8.37				170
6.47	0.000	0.563	0.168	0.730	2.65	0.35	2.30	7.98				
7.47	0.000	0.493	0.214	0.707	2.91	0.41	2.51	8.27				
8.47	0.000	0.442	0.252	0.694	2.65	0.35	2.30	7.89				
9.47	0.000	0.375	0.304	0.679	2.90	0.33	2.58	7.89	**	**	0.044	
10.47	0.000	0.238	0.407	0.645	2.67	0.39	2.27	7.79				
11.47	0.010	0.074	0.528	0.602	2.49	0.33	2.16	8.53				
12.47	0.103	0.007	0.533	0.540	2.60	0.42	2.17	8.62				170
13.47	0.253	0.006	0.446	0.452	2.36	0.32	2.04	8.42	**	0.430	0.097	
14.47	0.396	0.006	0.366	0.372	2.13	0.33	1.80	8.36				210
15.47	0.506	0.007	0.282	0.290	1.99	0.40	1.59	8.24				
16.47	0.560	0.007	0.211	0.219	1.88	0.33	1.55	8.08				
17.47	0.542	0.007	0.152	0.159	1.66	0.39	1.27	7.99				
18.47	0.494	0.007	0.093	0.101	1.54	0.37	1.17	7.90				
19.47	0.459	0.006	0.078	0.084	1.53	0.42	1.11	7.71				
20.47	0.431	0.006	0.074	0.080	1.52	0.35	1.16	7.34				
21.47	0.405	0.006	0.067	0.074	1.45	0.44	1.01	7.41				0
22.47	0.376	0.005	0.063	0.068	1.41	0.36	1.05	7.24				
23.47	0.352	0.004	0.057	0.061	1.33	0.37	0.96	7.07				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	24.4	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	22.8	0.00	0.00			
5.47		0.01	0.28			
6.47		0.11	5.68			
7.47	22.8	0.17	11.96			
8.47		0.08	19.64			
9.47		0.27	29.76			
10.47	24.4	0.69	57.72	9.63	10.25	
11.47		1.15	112.00			
12.47		1.19	182.12			
13.47	30.6	1.11	251.28			
14.47		0.99	314.52			
15.47		0.77	367.76			
16.47	30.0	0.47	405.56			
17.47		0.23	427.04			
18.47		0.06	436.08			
19.47	26.7	0.00	438.00			
20.47		0.00	438.00			
21.47		0.00	438.00			
22.47	22.8	0.00	438.00			
23.47		0.00	438.00			

% POSSIBLE MINUTES OF SUNSHINE 62

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8-28-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.329	0.003	0.056	0.059	1.48	0.34	1.14	6.93				
1.47	0.309	0.004	0.051	0.055	1.57	0.36	1.21	6.81				
2.47	0.292	0.003	0.050	0.053	1.34	0.37	0.97	6.57				
3.47	0.276	0.002	0.049	0.051	1.56	0.39	1.17	6.35				
4.47	0.259	0.001	0.046	0.047	1.56	0.46	1.10	7.93				
5.47	0.247	0.001	0.046	0.047	1.55	0.44	1.10	7.43				130
6.47	0.234	0.001	0.047	0.048	1.46	0.45	1.01	7.26				
7.47	0.217	0.002	0.052	0.055	1.48	0.43	1.05	7.51				
8.47	0.225	0.002	0.055	0.057	**	**	**	**	0.267	0.016	0.114	
9.47	0.258	0.002	0.055	0.057	**	**	**	**				
10.47	0.310	0.003	0.055	0.058	**	**	**	**				
11.47	0.370	0.004	0.052	0.057	**	**	**	**				
12.47	0.424	0.004	0.051	0.056	**	**	**	**				
13.47	0.458	0.006	0.050	0.057	**	**	**	**	0.499	0.018	0.093	
14.47	0.481	0.007	0.047	0.055	**	**	**	**				
15.47	0.488	0.009	0.046	0.055	**	**	**	**				
16.47	0.480	0.010	0.043	0.052	1.47	0.41	1.06	7.43				
17.47	0.461	0.011	0.041	0.051	1.52	0.52	1.00	7.44				
18.47	0.440	0.012	0.035	0.047	1.31	0.48	0.83	7.10				
19.47	0.413	0.011	0.031	0.042	1.22	0.44	0.79	7.12				
20.47	0.390	0.010	0.029	0.039	1.32	0.40	0.91	7.03				
21.47	0.373	0.009	0.026	0.034	1.38	0.47	0.90	6.94				
22.47	0.358	0.007	0.026	0.033	1.33	0.50	0.83	6.81				
23.47	0.344		0.025		1.40	0.50	0.90	6.56				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.9	0.00	0.00			
5.47		0.02	0.56			
6.47		0.13	4.84			
7.47	19.4	0.39	19.92			
8.47		0.60	49.20			
9.47		0.90	93.60			
10.47	27.8	1.15	154.60	9.63		10.25
11.47		1.24	226.12			
12.47		1.25	300.80			
13.47	30.6	1.16	373.28			
14.47		1.02	438.96			
15.47		0.80	494.00			
16.47	31.1	0.54	534.72			
17.47		0.24	558.72			
18.47		0.06	568.08			
19.47	24.4	0.00	570.00			
20.47		0.00	570.00			
21.47		0.00	570.00			
22.47	20.6	0.00	570.00			
23.47		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8-29-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.333	0.004	0.024	0.028	1.35	0.45	0.90	6.31				
1.47	0.320	0.003	0.022	0.026	1.40	0.50	0.90	6.20				
2.47	0.309	0.002	0.021	0.024	1.30	0.53	0.77	5.90				
3.47	0.299	0.002	0.021	0.024	1.25	0.51	0.74	5.66				
4.47	0.290	0.001	0.021	0.022	1.23	0.57	0.66	5.24				
5.47	0.280	0.001	0.021	0.022	1.15	0.49	0.66	5.15				130
6.47	0.271	0.000	0.020	0.020	1.13	0.52	0.61	4.82				
7.47	0.259	0.000	0.022	0.022	1.23	0.48	0.75	4.96				
8.47	0.248	0.001	0.026	0.027					0.287	0.011	0.050	
9.47	0.249	0.002	0.030	0.032								
10.47	0.260	0.002	0.032	0.034								
11.47	0.281	0.003	0.033	0.036								
12.47	0.309	0.004	0.034	0.039					0.339	0.016	0.082	
13.47	0.333	0.006	0.035	0.042								
14.47	0.353	0.007	0.035	0.043								
15.47	0.361	0.011	0.036	0.047								
16.47	0.359	0.013	0.035	0.048								
17.47												210
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	17.2	0.00	0.00			
5.47		0.01	0.28			
6.47		0.12	3.96			
7.47	18.9	0.38	18.44			
8.47		0.61	47.68			
9.47		0.92	92.96			
10.47	26.1	1.10	153.20			
11.47		1.23	222.84			
12.47		1.25	297.20			
13.47	29.4	1.16	369.68			
14.47		1.03	435.64			
15.47		0.82	491.56			
16.47	31.1	0.54	532.92			
17.47		0.26	557.48			
18.47		0.05	567.20			
19.47	25.0	0.00	568.80			
20.47		0.00	568.80			
21.47		0.00	568.80			
22.47	21.1	0.00	568.80			
23.47		0.00	568.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

*6800 data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8-27-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC** (PPM)	CH4** (PPM)	NMHC** (PPM)	CO* (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.017	0.018	0.035								
3.63	0.000	0.106	0.041	0.147				10.29				
4.63	0.000	0.105	0.045	0.150				10.10				
5.63	0.000	0.104	0.047	0.151				9.81				760
6.63	0.000	0.079	0.066	0.145				9.81				
7.63	0.011	0.013	0.122	0.135				9.72				
8.63	0.025	0.007	0.118	0.125				9.52				
9.63	0.056	0.005	0.107	0.112				8.95	0.088	0.116	0.038	
10.63	0.124	0.003	0.091	0.094				8.66				
11.63	0.255	0.003	0.072	0.075				9.11				
12.63	0.373	0.003	0.057	0.060				8.76				460
13.63	0.432	0.005	0.047	0.052				8.41	0.459	0.046	0.050	
14.63	0.455	0.005	0.041	0.046				8.04				290
15.63	0.446	0.006	0.035	0.042				7.77				
16.63	0.420	0.007	0.032	0.040				7.45				
17.63	0.393	0.007	0.030	0.037				7.11				
18.63	0.366	0.007	0.024	0.031				6.85				
19.63	0.335	0.007	0.021	0.029				6.47				
20.63	0.309	0.006	0.019	0.026				6.34				
21.63	0.289	0.006	0.017	0.024				6.12				0
22.63	0.267	0.005	0.015	0.020				5.78				
23.63	0.249	0.004	0.014	0.018				5.55				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	24.4	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	22.8	0.00	0.00			
5.63		0.01	0.38			
6.63		0.11	4.78	9.06	6.75	
7.63	22.8	0.17	13.66			
8.63		0.08	20.44			
9.63		0.27	32.46			
10.63	24.4	0.69	64.62			
11.63		1.15	123.50			
12.63		1.19	194.02			
13.63	30.6	1.11	262.58			
14.63		0.99	324.42			
15.63		0.77	375.46			
16.63	30.0	0.47	410.26			
17.63		0.23	429.54			
18.63		0.06	436.68			
19.63	26.7	0.00	438.00			
20.63		0.00	438.00			
21.63		0.00	438.00			
22.63	22.8	0.00	438.00			
23.63		0.00	438.00			

% POSSIBLE MINUTES OF SUNSHINE 62

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

*CO data erratic but retained. Shifts due to calibration changes

**THC, CH_4 and NMHC data discarded due to excessive calibration errors.

CHAMBER NUMBER 4
DAY 2 OF 3 8-28-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC ** (PPM)	CH4 ** (PPM)	NMHC** (PPM)	CO* (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.232	0.003	0.013	0.016				5.41				
1.63	0.216	0.002	0.013	0.015				5.11				
2.63	0.203	0.002	0.013	0.015				4.85				
3.63	0.189	0.002	0.012	0.014				4.67				
4.63	0.175	0.002	0.012	0.014				4.22				
5.63	0.166	0.001	0.011	0.012				3.96				150
6.63	0.155	0.001	0.011	0.012				3.87				
7.63	0.143	0.002	0.013	0.015				3.49				
8.63	0.159	0.002	0.014	0.016				3.75	0.155	0.009	0.045	
9.63	0.147	0.002	0.015	0.017				3.65				
10.63	0.163	0.003	0.018	0.021				3.39				
11.63	0.175	0.003	0.018	0.021				3.21				
12.63	0.212	0.004	0.018	0.022								
13.63	0.228	0.006	0.018	0.025					0.234	0.010	0.025	
14.63	0.243	0.007	0.018	0.026								
15.63	0.245	0.009	0.018	0.027								
16.63	0.241	0.011	0.017	0.028								
17.63	0.231	0.012	0.017	0.029								
18.63	0.218	0.012	0.015	0.027								
19.63	0.205	0.011	0.013	0.024								
20.63	0.195	0.010	0.012	0.021								
21.63	0.187	0.007	0.010	0.017								
22.63	0.181	0.006	0.010	0.016								
23.63	0.174	0.005	0.009	0.014								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.9	0.00	0.00			
5.63		0.02	0.76			
6.63		0.13	6.14	9.06		6.75
7.63	19.4	0.39	23.82			
8.63		0.60	55.20			
9.63		0.90	102.60			
10.63	27.8	1.15	166.10			
11.63		1.24	238.52			
12.63		1.25	313.30			
13.63	30.6	1.16	384.88			
14.63		1.02	449.16			
15.65		0.80	502.00			
16.63	31.1	0.54	540.12			
17.63		0.24	561.12			
18.63		0.06	568.68			
19.63	24.4	0.00	570.00			
20.63		0.00	570.00			
21.63		0.00	570.00			
22.63	20.6	0.00	570.00			
23.63		0.00	570.00			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 89.0 CENT

*CO data erratic but retained. Shifts due to calibration changes.

**THC, CH_4 and NMHC data discarded due to excessive calibration error.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 5 OF 5 8-29-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOx: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC** (PPM)	CH4 ** (PPM)	NMHC** (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.169	0.004	0.009	0.013								
1.63	0.164	0.003	0.007	0.011								
2.63	0.158	0.002	0.007	0.010								
3.63	0.152	0.001	0.007	0.009								
4.63	0.149	0.001	0.007	0.009								
5.63	0.143	0.001	0.007	0.009								
6.63	0.137	0.000	0.007	0.007								150
7.63	0.130	0.000	0.010	0.010								
8.63	0.125	0.002	0.011	0.013								
9.63	0.127	0.002	0.013	0.015					0.104	0.009	0.024	
10.63	0.137	0.002	0.014	0.016								
11.63	0.152	0.003	0.014	0.017								
12.63	0.172	0.004	0.015	0.019								
13.63	0.191	0.007	0.015	0.022					0.193	0.014	0.047	
14.63	0.204	0.009	0.016	0.025								
15.63	0.212	0.012	0.016	0.028								
16.63	0.206	0.014	0.017	0.031								
17.63												210
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	17.2	0.00	0.00			
5.63		0.01	0.58			
6.63		0.12	5.16			
7.63	18.9	0.58	22.24			
8.63		0.61	53.78			
9.63		0.92	102.16			
10.63	26.1	1.10	164.20			
11.63		1.23	255.14			
12.63		1.25	309.70			
13.63	29.4	1.16	381.28			
14.63		1.03	445.94			
15.63		0.82	499.76			
16.63	31.1	0.54	538.52			
17.63		0.26	560.08			
18.63		0.05	567.70			
19.63	25.0	0.00	568.80			
20.63		0.00	568.80			
21.63		0.00	568.80			
22.63	21.1	0.00	568.80			
23.63		0.00	568.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 88.0 CENT

*CO data erratic but retained. Shifts due to calibration changes.

**THC, CH_4 and NMHC data discarded due to excessive calibration error

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 9-25-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.015	0.002	0.017	1.14	0.66	0.48	0.08				
1.80	0.000	0.015	0.002	0.017	1.13	0.62	0.50	0.07				
2.80	0.000	0.015	0.002	0.017	1.13	0.63	0.50	0.04				
3.80	0.000	0.917	0.198	1.114	6.07	0.61	5.47	9.45				
4.80	0.000	0.911	0.213	1.124	6.43	0.60	5.82	9.45				0
5.80	0.000	0.891	0.217	1.108	6.97	0.62	6.35	9.45				
6.80	0.000	0.822	0.216	1.038	6.66	0.60	6.06	8.93				
7.80	0.000	0.701	0.211	0.911	5.94	0.58	5.35	7.82				
8.80	0.000	0.588	0.203	0.791	5.26	0.52	4.74	6.70				
9.80	0.000	0.466	0.220	0.687	4.64	0.45	4.18	5.84				
10.80	0.000	0.337	0.263	0.600	4.13	0.45	3.68	5.13				
11.80	0.000	0.241	0.271	0.511	3.63	0.31	3.32	4.22				
12.80	0.001	0.152	0.287	0.438	3.17	0.25	2.91	3.86	0.051	0.219	0.047	
13.80	0.010	0.091	0.279	0.370	2.74	0.20	2.55	3.35				
14.80	0.013	0.061	0.256	0.317	2.47	0.20	2.27	2.95				
15.80	0.018	0.043	0.225	0.267	2.19	0.16	2.02	2.56				
16.80	0.018	0.033	0.195	0.228	1.95	0.15	1.80	2.22				
17.80	0.009	0.027	0.174	0.201	1.76	0.10	1.65	1.93	0.064 *	0.034 *	0.057	
18.80	0.000	0.020	0.151	0.171								0
19.80	0.000	0.019	0.130	0.150	1.47	0.11	1.36	1.51				
20.80	0.000	0.019	0.112	0.132	1.35	0.08	1.26	1.32				0
21.80	0.000	0.017	0.096	0.113	1.22	0.08	1.13	1.15				
22.80	0.000	0.017	0.083	0.101	1.13	0.14	0.99	1.05				
23.80	0.000	0.017	0.071	0.088	1.03	0.10	0.93	0.86				

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	21.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	20.6	0.00	0.00			
5.80		0.00	0.00			
6.80		0.01	0.48	39.93	6.33	
7.80	18.9	0.02	1.56			
8.80		0.07	5.16			
9.80		0.13	12.24			
10.80	18.9	0.20	23.40			
11.80		0.22	36.36			
12.80		0.29	52.92			
13.80	20.0	0.25	68.40			
14.80		0.15	78.60			
15.80		0.23	91.44			
16.80	20.0	0.11	99.48			
17.80		0.01	101.28			
18.80		0.00	101.40			
19.80	20.0	0.00	101.40			
20.80		0.00	101.40			
21.80		0.00	101.40			
22.80	19.4	0.00	101.40			
23.80		0.00	101.40			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 21.7 CENT

* Data Suspect But Retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 9-26-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.015	0.061	0.076	0.96	0.09	0.87	0.78				
1.80	0.000	0.014	0.055	0.068	0.91	0.09	0.82	0.68				
2.80	0.000	0.013	0.045	0.058	0.87	0.10	0.76	0.87				
3.80	0.000	0.013	0.040	0.052	0.81	0.11	0.70	0.52				
4.80	0.000	0.016	0.032	0.048	0.78	0.12	0.66	0.44				
5.80	0.000	0.015	0.031	0.046	0.76	0.11	0.65	0.40				
6.80	0.001	0.019	0.027	0.046	0.79	0.11	0.68	0.39				0
7.80	0.009	0.011	0.030	0.041	0.77	0.11	0.66	0.38				
8.80	0.031	0.018	0.021	0.040	0.77	0.11	0.66	0.44	0.025	0.031	0.086	
9.80	0.056	0.022	0.031	0.053	0.71	0.06	0.65	0.39				
10.80	0.082	0.021	0.035	0.057	0.74	0.16	0.59	0.47				
11.80	0.107	0.024	0.032	0.056	0.67	0.16	0.51	0.33				
12.80	0.121	0.015	0.030	0.045	0.68	0.12	0.56	0.43				
13.80	0.132	0.022	0.027	0.049	0.69	0.12	0.57	0.49				
14.80	0.146	0.026	0.026	0.051	0.67	0.11	0.56	0.54	0.119	0.031	0.031	
15.80	0.140	0.024	0.025	0.048	0.70	0.12	0.58	0.51				
16.80	0.136	0.021	0.025	0.046	0.72	0.16	0.56	0.54				0
17.80	0.123	0.018	0.020	0.039	0.65	0.14	0.51	0.51				
18.80	0.109	0.011	0.016	0.027	0.78	0.13	0.65	0.53				
19.80	0.102	0.006	0.014	0.020	0.80	0.15	0.65	0.53				
20.80	0.094	0.004	0.012	0.016	0.84	0.17	0.67	0.55				
21.80	0.086	0.003	0.012	0.015	0.84	0.15	0.69	0.56				
22.80	0.082	0.002	0.011	0.013	0.87	0.18	0.69	0.56				0
23.80	0.076	0.001	0.011	0.012	0.87	0.16	0.70	0.56				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	18.9	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	18.9	0.00	0.00			
5.80		0.00	0.00			
6.80		0.02	0.96	39.93		6.33
7.80	18.9	0.14	7.92			
8.80		0.53	35.04			
9.80		0.72	75.96			
10.80	21.1	0.82	123.96			
11.80		0.93	178.44			
12.80		0.76	226.08			
13.80	24.4	0.88	277.44			
14.80		0.93	332.64			
15.80		0.55	370.20			
16.80	25.6	0.34	393.12			
17.80		0.10	402.00			
18.80		0.00	403.20			
19.80	20.0	0.00	403.20			
20.80		0.00	403.20			
21.80		0.00	403.20			
22.80	17.8	0.00	403.20			
23.80		0.00	403.20			

% POSSIBLE MINUTES OF SUNSHINE 47

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* The apparent increase in NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 9-27-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.073	0.001	0.010	0.011	0.88	0.19	0.69	0.57				
1.80	0.066	0.000	0.010	0.010	0.88	0.19	0.69	0.58				
2.80	0.063	0.000	0.010	0.010	0.91	0.19	0.72	0.60				
3.80	0.059	0.000	0.009	0.009	0.93	0.22	0.71	0.59				
4.80	0.055	0.000	0.009	0.009	0.93	0.20	0.73	0.60				
5.80	0.054	0.000	0.009	0.009	0.94	0.23	0.71	0.60				0
6.80	0.050	0.000	0.009	0.009	0.93	0.20	0.73	0.56				
7.80	0.044	0.000	0.009	0.009	0.89	0.22	0.67	0.54				
8.80	0.043	0.001	0.009	0.010	0.86	0.20	0.66	0.53	0.033	0.006	0.023	
9.80	0.043	0.003	0.009	0.012	0.85	0.20	0.65	0.55				
10.80	0.052	0.010	0.010	0.019	0.83	0.17	0.66	0.49				
11.80	0.070	0.011	0.010	0.020	0.85	0.25	0.60	0.58				
12.80	0.082	0.013	0.012	0.025	0.84	0.23	0.61	0.55				
13.80	0.096	0.013	0.012	0.025	0.84	0.23	0.61	0.57	0.113	0.011	0.038	
14.80												
15.80												
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	16.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	15.6	0.00	0.00			
5.80		0.00	0.00			
6.80		0.08	3.84			
7.80	14.4	0.12	10.56			
8.80		0.13	18.24			
9.80		0.51	44.28			
10.80	18.3	0.72	84.96			
11.80		1.06	144.48			
12.80		0.80	195.60			
13.80	22.2	1.06	256.08			
14.80		0.82	308.16			
15.80		0.60	346.80			
16.80	23.3	0.33	364.84			
17.80		0.10	370.60			
18.80		0.00	379.80			
19.80	18.3	0.00	379.80			
20.80		0.00	379.80			
21.80		0.00	379.80			
22.80	16.1	0.00	379.80			

% POSSIBLE MINUTES OF SUNSHINE 57

RDU AIRPORT MAXIMUM TEMPERATURE 24.4 CENT

* The apparent increase in NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 9-25-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.015	0.002	0.017	1.53	1.17	0.36	0.08				
1.97	0.000	0.015	0.002	0.017	1.53	1.15	0.38	0.05				
2.97	0.000	0.015	0.002	0.017	1.53	1.14	0.39	0.06				
3.97	0.000	0.221	0.068	0.290	3.65	1.15	2.50	10.65				
4.97	0.000	0.221	0.062	0.283	5.08	1.14	3.94	10.57				
5.97	0.000	0.219	0.061	0.280	5.09	1.15	3.94	10.65				0
6.97	0.000	0.202	0.058	0.260	4.81	1.12	3.69	9.88				
7.97	0.000	0.167	0.061	0.228	4.32	1.08	3.24	8.50				
8.97	0.000	0.118	0.078	0.196	3.81	0.94	2.87	7.13				
9.97	0.002	0.056	0.101	0.156	3.31	0.81	2.50	6.30				
10.97	0.039	0.020	0.108	0.128	2.91	0.75	2.15	5.34				
11.97	0.056	0.015	0.090	0.105	2.56	0.62	1.94	4.54				
12.97	0.068	0.015	0.074	0.089	2.24	0.52	1.72	3.89	0.085	0.074	0.048	
13.97	0.080	0.016	0.059	0.075	1.92	0.38	1.54	3.28				
14.97	0.074	0.017	0.047	0.064	1.78	0.42	1.36	2.88				
15.97	0.070	0.017	0.039	0.056	1.62	0.39	1.23	2.47				
16.97	0.056	0.016	0.032	0.048	1.48	0.36	1.12	2.13				
17.97	0.044	0.019	0.027	0.046	1.40	0.33	1.07	1.83	0.076	0.065	0.050	
18.97	0.032	0.019	0.021	0.041	1.34	0.35	0.99	1.65				0
19.97	0.023	0.019	0.019	0.039	1.23	0.33	0.90	1.40				
20.97		0.018	0.017	0.035	1.18	0.33	0.85	1.23				0
21.97	0.013	0.016	0.014	0.030	1.09	0.26	0.83	0.99				
22.97	0.009	0.016	0.011	0.027	1.06	0.32	0.74	0.95				
23.97	0.007	0.017	0.011	0.028	0.99	0.28	0.71	0.82				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	21.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	20.6	0.00	0.00			
5.97		0.00	0.00			
6.97		0.01	0.58	65.70	6.33	
7.97	18.9	0.02	1.76			
8.97		0.07	5.86			
9.97		0.13	13.54			
10.97	18.9	0.20	25.40			
11.97		0.22	38.56			
12.97		0.29	55.82			
13.97	20.0	0.25	70.90			
14.97		0.15	80.10			
15.97		0.23	93.74			
16.97	20.0	0.11	100.58			
17.97		0.01	101.38			
18.97		0.00	101.40			
19.97	20.0	0.00	101.40			
20.97		0.00	101.40			
21.97		0.00	101.40			
22.97	19.4	0.00	101.40			
23.97		0.00	101.40			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 21.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 9-26-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.003	0.016	0.010	0.026	0.95	0.25	0.69	0.66				
1.97	0.002	0.014	0.007	0.021	0.93	0.25	0.67	0.60				
2.97	0.001	0.015	0.007	0.022	0.91	0.27	0.64	0.52				
3.97	0.000	0.015	0.007	0.022	0.91	0.29	0.62	0.45				
4.97	0.000	0.016	0.006	0.022	0.89	0.27	0.62	0.39				
5.97	0.001	0.017	0.006	0.024	0.89	0.26	0.63	0.33				0
6.97	0.001	0.016	0.007	0.024	0.92	0.31	0.62	0.33				
7.97	0.007	0.011	0.009	0.019	0.91	0.31	0.60	0.33				
8.97	0.022	0.018	0.011	0.029	0.92	0.29	0.63	0.34	0.002	0.028	0.056	
9.97	0.050	0.024	0.013	0.036	0.81	0.24	0.57	0.26				
10.97	0.069	0.024	0.012	0.035	0.99	0.33	0.66	0.41				
11.97	0.087	0.027	0.012	0.039	0.86	0.32	0.54	0.43				
12.97	0.096	0.020	0.012	0.032	0.85	0.32	0.53	0.43				
13.97	0.106	0.026	0.013	0.039	0.84	0.31	0.52	0.42				
14.97	0.109	0.029	0.012	0.041	0.87	0.31	0.56	0.42	0.076 **	0.010	0.007	
15.97	0.108	0.029	0.012	0.041	0.80	0.31	0.49	0.37				0
16.97	0.104	0.022	0.012	0.034	0.87	0.36	0.51	0.49				
17.97	0.095	0.015	0.011	0.026	0.92	0.36	0.56	0.47				
18.97	0.086	0.009	0.009	0.017	0.93	0.38	0.55	0.45				
19.97	0.079	0.006	0.009	0.015	0.96	0.38	0.57	0.46				
20.97	0.074	0.004	0.006	0.011	0.98	0.39	0.58	0.46				
21.97	0.072	0.003	0.006	0.010	1.00	0.39	0.62	0.46				0
22.97	0.065	0.002	0.007	0.010	1.02	0.40	0.62	0.47				
23.97	0.062	0.001	0.007	0.009	1.04	0.43	0.61	0.48				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	18.9	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	18.9	0.00	0.00			
5.97		0.00	0.00			
6.97		0.02	1.16	65.70		6.33
7.97	18.9	0.14	9.32			
8.97		0.53	40.34			
9.97		0.72	83.16			
10.97	21.1	0.82	132.16			
11.97		0.93	187.74			
12.97		0.76	233.68			
13.97	24.4	0.88	286.24			
14.97		0.93	341.94			
15.97		0.55	375.70			
16.97	25.6	0.34	396.52			
17.97		0.10	403.00			
18.97		0.00	403.20			
19.97	20.0	0.00	403.20			
20.97		0.00	403.20			
21.97		0.00	403.20			
22.97	17.8	0.00	403.20			
23.97		0.00	403.20			

% POSSIBLE MINUTES OF SUNSHINE 47

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* The apparent increase in NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

** Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 9-27-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.056	0.000	0.007	0.007	1.07	0.45	0.62	0.51				
1.97	0.055	0.000	0.006	0.006	1.10	0.45	0.64	0.54				
2.97	0.052	0.000	0.007	0.007	1.12	0.43	0.68	0.56				
3.97	0.048	0.000	0.006	0.006	1.13	0.45	0.68	0.55				
4.97	0.044	0.000	0.005	0.005	1.14	0.47	0.67	0.57				
5.97	0.044	0.000	0.005	0.005	1.15	0.45	0.70	0.53				
6.97	0.042	0.000	0.005	0.005	1.10	0.43	0.67	0.51				0
7.97	0.039	0.001	0.004	0.005	1.04	0.47	0.58	0.52				
8.97	0.033	0.004	0.004	0.009	1.02	0.45	0.57	0.49	0.030	0.004	0.011	
9.97	0.034	0.000	0.004	0.004	1.01	0.42	0.59	0.47				
10.97	0.042	0.012	0.007	0.019	0.91	0.35	0.56	0.40				
11.97	0.054	0.019	0.006	0.026	0.98	0.45	0.53	0.52				
12.97	0.064	0.020	0.010	0.030	0.96	0.42	0.54	0.52				
13.97	0.076	0.020	0.010	0.030	0.96	0.42	0.54	0.49	0.081	0.007	0.073	
14.97												
15.97												
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	16.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	15.6	0.00	0.00			
5.97		0.00	0.00			
6.97		0.08	4.64			
7.97	18.4	0.12	11.76			
8.97		0.13	19.54			
9.97		0.51	49.58			
10.97	18.3	0.72	92.16			
11.97		1.06	155.08			
12.97		0.80	203.60			
13.97	22.2	1.06	266.68			
14.97		0.82	316.36			
15.97		0.60	352.80			
16.97	23.3	0.33	373.14			
17.97		0.10	379.60			
18.97		0.00	379.80			
19.97	18.3	0.00	379.80			
20.97		0.00	379.80			
21.97		0.00	379.80			
22.97	16.1	0.00	379.80			

% POSSIBLE MINUTES OF SUNSHINE 57

RDU AIRPORT MAXIMUM TEMPERATURE 24.4 CENT

* The apparent increase in NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 9-25-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.014	0.001	0.015	0.94	0.41	0.53	0.10				
1.13	0.000	0.017	0.001	0.018	0.90	0.37	0.53	0.09				
2.13	0.000	0.017	0.001	0.018	0.86	0.31	0.56	0.07				
3.13	0.000	0.017	0.001	0.018	0.85	0.28	0.56	0.08				
4.13	0.000	0.663	0.143	0.806	2.35	0.30	2.05	9.88				
5.13	0.000	0.656	0.149	0.804	3.54	0.29	3.24	9.88				
6.13	0.000	0.644	0.152	0.796	3.96	0.31	3.65	9.79				160
7.13	0.000	0.573	0.149	0.722	3.69	0.31	3.38	8.93				
8.13	0.000	0.482	0.137	0.619	3.29	0.32	2.97	7.56				
9.13	0.000	0.397	0.128	0.525	2.92	0.34	2.58	6.36				
10.13	0.000	0.314	0.132	0.446	2.55	0.23	2.31	5.48				
11.13	0.000	0.232	0.143	0.375	2.32	0.30	2.02	4.66				
12.13	0.000	0.173	0.143	0.317	2.09	0.28	1.81	3.97	0.027*	0.159	0.023	
13.13	0.002	0.127	0.145	0.273	1.85	0.27	1.58	3.36				
14.13	0.002	0.087	0.141	0.228	1.60	0.19	1.41	2.76				
15.13	0.009	0.065	0.126	0.191	1.53	0.29	1.24	2.45				
16.13	0.009	0.051	0.110	0.161	1.40	0.27	1.13	2.06				
17.13	0.002	0.035	0.102	0.137	1.31	0.29	1.02	1.77	0.039*	0.056*	0.034	
18.13	0.000	0.032	0.088	0.120	1.22	0.27	0.96	1.49				
19.13	0.000	0.029	0.078	0.107	1.17	0.29	0.89	1.32				90
20.13	0.000	0.027	0.066	0.093	1.09	0.27	0.82	1.13				
21.13	0.000	0.022	0.056	0.078	1.08	0.32	0.76	0.97				
22.13	0.000	0.021	0.050	0.072	0.95	0.26	0.69	1.18				0
23.13	0.000	0.021	0.043	0.064	1.02	0.34	0.68	0.76				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08	58.05	6.33	
7.13	18.9	0.02	0.76			
8.13		0.07	2.36			
9.13		0.13	7.04			
10.13	18.9	0.20	15.40			
11.13		0.22	27.56			
12.13		0.29	41.32			
13.13	20.0	0.25	58.40			
14.13		0.15	72.60			
15.13		0.23	82.24			
16.13	20.0	0.11	95.08			
17.13		0.01	100.88			
18.13		0.00	101.40			
19.13	20.0	0.00	101.40			
20.13		0.00	101.40			
21.13		0.00	101.40			
22.13	19.4	0.00	101.40			
23.13		0.00	101.40			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 21.7 CENT

* Data suspect but retained

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 9-26-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-3 (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.020	0.036	0.057	0.96	0.31	0.65	0.62				
1.13	0.000	0.017	0.032	0.049	1.04	0.33	0.70	0.53				
2.13	0.000	0.014	0.027	0.041	0.96	0.35	0.60	0.44				
3.13	0.000	0.017	0.024	0.041	0.95	0.37	0.58	0.42				
4.13	0.000	0.016	0.021	0.037	0.93	0.37	0.56	0.35				
5.13	0.000	0.013	0.020	0.033	0.94	0.37	0.57	0.38				
6.13	0.000	0.015	0.018	0.033	0.92	0.38	0.54	0.24				180
7.13	0.001	0.018	0.016	0.034	0.96	0.40	0.56	0.25				
8.13	0.009	0.013	0.018	0.031	0.96	0.41	0.54	0.29	0.030	0.021	0.036	
9.13	0.021	0.019	0.021	0.041	0.97	0.39	0.58	0.32				
10.13	0.037	0.025	0.021	0.046	0.84	0.33	0.50	0.20				
11.13	0.047	0.030	0.021	0.051	0.93	0.45	0.48	0.34				
12.13	0.055	0.030	0.020	0.050	0.95	0.45	0.49	0.35				
13.13	0.063	0.024	0.020	0.044	0.93	0.45	0.48	0.37				
14.13	0.065	0.031	0.018	0.049	0.93	0.45	0.48	0.36	0.063	0.021	0.015	
15.13	0.074	0.032	0.018	0.050	0.97	0.50	0.47	0.37				
16.13	0.074	0.030	0.016	0.046	0.91	0.47	0.44	0.31				60
17.13	0.068	0.024	0.016	0.040	1.00	0.52	0.48	0.37				
18.13	0.062	0.014	0.014	0.028	1.06	0.56	0.50	0.41				
19.13	0.055	0.009	0.013	0.021	1.10	0.58	0.52	0.40				
20.13	0.051	0.006	0.012	0.018	1.12	0.58	0.53	0.39				
21.13	0.044	0.003	0.011	0.014	1.14	0.59	0.54	0.38				
22.13	0.043	0.002	0.011	0.013	1.17	0.61	0.56	0.42				0
23.13	0.039	0.002	0.010	0.012	1.20	0.61	0.59	0.44				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.9	0.00	0.00			
5.13		0.00	0.00			
6.13		0.02	0.16	58.05		6.33
7.13	18.9	0.14	2.32			
8.13		0.55	13.84			
9.13		0.72	47.16			
10.13	21.1	0.82	91.16			
11.13		0.93	141.24			
12.13		0.76	195.68			
13.13	24.4	0.88	242.24			
14.13		0.93	295.44			
15.13		0.55	348.20			
16.13	25.6	0.34	379.52			
17.13		0.10	398.00			
18.13		0.00	403.20			
19.13	20.0	0.00	403.20			
20.13		0.00	403.20			
21.13		0.00	403.20			
22.13	17.8	0.00	403.20			
23.13		0.00	403.20			

% POSSIBLE MINUTES OF SUNSHINE 47

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* The apparent increase in the NO concentration is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 9-27-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.034	0.000	0.010	0.010	1.27	0.63	0.64	0.47				
1.13	0.032	0.000	0.010	0.010	1.23	0.67	0.57	0.48				
2.13	0.029	0.000	0.011	0.011	1.35	0.66	0.69	0.47				
3.13	0.023	0.000	0.010	0.010	1.31	0.67	0.65	0.51				
4.13	0.022	0.000	0.009	0.009	1.34	0.68	0.67	0.51				
5.13	0.021	0.000	0.009	0.009	1.32	0.68	0.64	0.51				
6.13	0.021	0.000	0.007	0.007	1.31	0.70	0.61	0.53				220
7.13	0.019	0.000	0.007	0.007	1.31	0.67	0.64	0.49				
8.13	0.019	0.000	0.007	0.007	1.24	0.73	0.51	0.49	0.017	0.008	0.018	
9.13	0.019	0.002	0.007	0.010	1.21	0.73	0.47	0.46				
10.13	0.031	0.003	0.003	0.006	1.29	0.71	0.58	0.47				
11.13	0.043	0.012	0.009	0.020	1.11	0.65	0.46	0.40				
12.13	0.056	0.018	0.004	0.022	1.27	0.73	0.53	0.48				
13.13	0.072	0.018	0.009	0.027	1.22	0.74	0.48	0.51	0.071	0.015	0.093	
14.13	0.079	0.022	0.011	0.033	1.02	0.73	0.30	0.48				
15.13												
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	16.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.08	0.64			
7.13	14.4	0.12	5.76			
8.13		0.13	13.04			
9.13		0.51	23.88			
10.13	18.3	0.72	56.16			
11.13		1.06	102.08			
12.13		0.80	163.60			
13.13	22.2	1.06	213.68			
14.13		0.82	275.56			
15.13		0.60	322.80			
16.13	23.3	0.33	356.64			
17.13		0.10	374.60			
18.13		0.00	379.80			
19.13	18.3	0.00	379.80			
20.13		0.00	379.80			
21.13		0.00	379.80			
22.13	16.1	0.00	379.80			

% POSSIBLE MINUTES OF SUNSHINE 57

RDU AIRPORT MAXIMUM TEMPERATURE 24.4 CENT

* The apparent increase in the NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 9-25-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.013	0.000	0.013	1.31	0.86	0.45	0.10				
1.30	0.000	0.014	0.001	0.015	1.27	0.37	0.90	0.09				
2.30	0.000	0.015	0.000	0.015	1.21	0.72	0.49	0.03				
3.30	0.000	0.015	0.000	0.015	1.17	0.68	0.49	7.71				
4.30	0.000	0.107	0.021	0.128	1.17	0.70	0.47	11.34				
5.30	0.000	0.106	0.021	0.127	1.97	0.72	1.25	11.34				0
6.30	0.000	0.105	0.021	0.126	1.94	0.70	1.24	11.28				
7.30	0.000	0.093	0.021	0.114	1.90	0.70	1.21	9.96				
8.30	0.000	0.075	0.022	0.097	1.74	0.65	1.10	8.42				
9.30	0.000	0.057	0.024	0.080	1.60	0.59	1.01	6.96				
10.30	0.000	0.042	0.029	0.071	1.35	0.43	0.92	6.11				
11.30	0.004	0.024	0.046	0.070	1.31	0.42	0.89	5.12				
12.30	0.013	0.021	0.032	0.053	1.19	0.33	0.86	4.34	0.023	0.031	0.019	
13.30	0.021	0.020	0.025	0.045	1.08	0.32	0.76	3.65				
14.30	0.032	0.019	0.021	0.041	0.90	0.19	0.71	3.05				
15.30	0.022	0.021	0.020	0.042	0.93	0.21	0.72	2.68				
16.30	0.021	0.018	0.018	0.036	0.86	0.16	0.70	2.25				
17.30	0.015	0.019	0.015	0.034	0.82	0.14	0.67	1.88	0.016	0.009	0.030	
18.30	0.010	0.020	0.012	0.032	0.76	0.10	0.67	1.60				0
19.30	0.008	0.018	0.011	0.029	0.72	0.09	0.63	1.40				
20.30	0.005	0.018	0.020	0.039	0.68	0.09	0.58	1.19				
21.30	0.002	0.017	0.012	0.029	0.66	0.08	0.58	1.02				0
22.30	0.001	0.017	0.009	0.026								
23.30	0.001	0.016	0.007	0.024	0.61	0.10	0.51	0.77				

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 21.7 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.6	0.00	0.00			
5.		0.00	0.00			
6.		0.01	0.18	62.58	6.33	
7.	18.9	0.02	0.96			
8.30		0.07	3.06			
9.30		0.13	8.34			
10.30	18.9	0.20	17.40			
11.30		0.22	29.76			
12.30		0.29	44.22			
13.30	20.0	0.25	60.90			
14.30		0.15	74.10			
15.30		0.23	84.54			
16.30	20.0	0.11	96.18			
17.30		0.01	100.98			
18.30		0.00	101.40			
19.30	20.0	0.00	101.40			
20.30		0.00	101.40			
21.30		0.00	101.40			
22.30	19.4	0.00	101.40			
23.30		0.00	101.40			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 5 9-26-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.017	0.007	0.025	0.56	0.08	0.48	0.64				
1.30	0.000	0.016	0.004	0.020	0.56	0.07	0.50	0.54				
2.30	0.000	0.015	0.003	0.018	0.56	0.09	0.47	0.48				
3.30	0.000	0.014	0.003	0.017	0.56	0.09	0.47	0.40				
4.30	0.000	0.014	0.003	0.017	0.45	0.10	0.35	0.37				
5.30	0.000	0.015	0.003	0.018	0.55	0.09	0.46	0.28				0
6.30	0.000	0.015	0.003	0.018	0.54	0.07	0.47	0.27				
7.30	0.000	0.018	0.003	0.021	0.55	0.09	0.46	0.28				
8.30	0.005	0.015	0.003	0.018	0.55	0.08	0.47	0.26	0.016	0.007	0.030	
9.30	0.014	0.019	0.004	0.024	0.56	0.08	0.48	0.31				
10.30	0.023	0.024	0.009	0.032	0.48	0.09	0.39	0.30				
11.30	0.033	0.029	0.009	0.037	0.54	0.10	0.44	0.29				
12.30	0.039	0.031	0.009	0.040	0.56	0.11	0.45	0.34				
13.30	0.042	0.027	0.009	0.035	0.56	0.11	0.45	0.34				
14.30	0.043	0.031	0.009	0.040	0.57	0.11	0.45	0.35	0.040	0.018	0.013	
15.30	0.047	0.032	0.009	0.041	0.59	0.14	0.45	0.35				0
16.30	0.046	0.032	0.009	0.041	0.55	0.08	0.47	0.33				
17.30	0.044	0.026	0.010	0.035	0.61	0.13	0.49	0.33				
18.30	0.040	0.014	0.009	0.022	0.70	0.13	0.56	0.35				
19.30	0.035	0.009	0.009	0.017	0.74	0.13	0.60	0.37				
20.30	0.032	0.004	0.007	0.012	0.75	0.13	0.62	0.37				
21.30	0.030	0.003	0.007	0.011	0.76	0.16	0.61	0.37				0
22.30	0.027	0.002	0.006	0.009	0.81	0.16	0.65	0.38				
23.30	0.023	0.002	0.006	0.009	0.82	0.17	0.65	0.37				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	18.9	0.00	0.00			
5.30		0.00	0.00			
6.30		0.02	0.36	62.58		6.33
7.30	18.9	0.14	3.72			
8.30		0.53	19.14			
9.30		0.72	54.36			
10.30	21.1	0.82	99.36			
11.30		0.93	150.54			
12.30		0.76	205.28			
13.30	24.4	0.88	251.04			
14.30		0.93	304.74			
15.30		0.55	353.70			
16.30	25.6	0.34	382.92			
17.30		0.10	399.00			
18.30		0.00	403.20			
19.30	20.0	0.00	403.20			
20.30		0.00	403.20			
21.30		0.00	403.20			
22.30	17.8	0.00	403.20			
23.30		0.00	403.20			

% POSSIBLE MINUTES OF SUNSHINE 47

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* The apparent increase in the NO and NO_x concentrations is probabably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 9-27-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.021	0.000	0.006	0.006	0.85	0.16	0.69	0.38				
1.30	0.021	0.000	0.006	0.006	0.88	0.17	0.71	0.42				
2.30	0.019	0.000	0.007	0.007	0.88	0.19	0.69	0.41				
3.30	0.016	0.000	0.007	0.007	0.90	0.19	0.72	0.38				
4.30	0.014	0.000	0.006	0.006	0.91	0.22	0.69	0.40				
5.30	0.012	0.000	0.005	0.005	0.93	0.19	0.74	0.39				130
6.30	0.010	0.000	0.005	0.005	0.93	0.23	0.70	0.41				
7.30	0.010	0.000	0.004	0.004	0.92	0.23	0.70	0.42				
8.30	0.010	0.000	0.004	0.004	0.87	0.22	0.65	0.40	0.006	0.007	0.031	
9.30	0.012	0.003	0.003	0.006	0.85	0.24	0.61	0.41				
10.30	0.021	0.007	0.007	0.015	0.89	0.24	0.65	0.45				
11.30	0.032	0.013	0.003	0.016	0.78	0.24	0.54	0.46				
12.30	0.042	0.011	0.002	0.013	0.83	0.28	0.55	0.45				
13.30	0.052	0.021	0.005	0.027	0.83	0.26	0.56	0.45	0.031**	0.011	0.123	
14.30	0.059	0.022	0.006	0.029	0.85	0.28	0.56	0.45				
15.30												
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	16.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.6	0.00	0.00			
5.30		0.00	0.00			
6.30		0.08	1.44			
7.30	14.4	0.12	6.96			
8.30		0.13	14.34			
9.30		0.51	28.98			
10.30	18.3	0.72	63.36			
11.30		1.06	112.68			
12.30		0.80	171.60			
13.30	22.2	1.06	224.28			
14.30		0.82	283.56			
15.30		0.60	328.80			
16.30	23.3	0.35	359.94			
17.30		0.10	375.60			
18.30		0.00	379.80			
19.30	18.3	0.00	379.80			
20.30		0.00	379.80			
21.30		0.00	379.80			
22.30	16.1	0.00	379.80			

% POSSIBLE MINUTES OF SUNSHINE 57

RDU AIRPORT MAXIMUM TEMPERATURE 24.4 CENT

* The apparent increase in NO and NO_x concentrations is probably due to thermal zero drift in the instrument.

** Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 9-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000	1.14	0.75	0.40	0.10				
1.63	0.000	0.000	0.000	0.000	1.14	0.70	0.44	0.10				
2.63	0.000	0.021	0.214	0.235	7.29	0.70	6.59	0.11				
3.63	0.000	0.824	0.206	1.030	10.64	0.70	9.94	10.18				
4.63	0.000	0.807	0.214	1.021	10.64	0.70	9.94	10.18				
5.63	0.000	0.790	0.225	1.015	10.55	0.57	9.97	9.89				0
6.63	0.000	0.723	0.228	0.951	10.28	0.69	9.60	9.60				
7.63	0.000	0.557	0.257	0.814	9.21	0.65	8.56	8.45				
8.63	0.001	0.241	0.433	0.674	7.71	0.56	7.14	7.39				
9.63	0.139	0.027	0.497	0.524	6.49	0.50	5.99	6.43	0.132	0.528	0.081	
10.63	0.267	0.018	0.372	0.390	5.51	0.41	5.10	5.64				
11.63	0.431	0.013	0.261	0.274	4.66	0.34	4.32	4.95				
12.63	0.557	0.013	0.170	0.183	3.97	0.26	3.71	4.33				700
13.63	0.538	0.013	0.121	0.134	3.43	0.24	3.19	3.85	0.489	0.032	0.134	
14.63	0.449	0.010	0.092	0.102	3.00	0.24	2.77	3.37				
15.63	0.364	0.011	0.075	0.086	2.71	0.21	2.49	2.89				
16.63	0.298	0.009	0.063	0.072	2.44	0.21	2.23	2.50				
17.63	0.241	0.005	0.052	0.058	2.21	0.20	2.01	2.19				
18.63	0.196	0.005	0.043	0.048	2.02	0.20	1.82	1.92				
19.63	0.160	0.005	0.037	0.043	1.85	0.20	1.64	1.65				
20.63	0.130	0.005	0.032	0.037	1.70	0.20	1.49	1.45				
21.63	0.106	0.005	0.026	0.031	1.58	0.20	1.38	1.32				0
22.63	0.086	0.005	0.022	0.028	1.48	0.21	1.27	1.15				
23.63	0.068	0.006	0.019	0.026	1.38	0.25	1.14	1.02				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	13.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.06	2.28	39.93	6.17	
7.63	15.3	0.27	13.86			
8.63		0.54	40.32			
9.63		0.69	78.42			
10.63	21.1	0.95	129.70			
11.63		1.08	191.64			
12.63		0.99	253.02			
13.63	21.7	0.68	300.64			
14.63		0.25	325.10			
15.63		0.06	332.88			
16.63	19.4	0.02	334.96			
17.63		0.00	335.40			
18.63		0.00	335.40			
19.63	17.2	0.00	335.40			
20.63		0.00	335.40			
21.63		0.00	335.40			
22.63	16.7	0.00	335.40			
23.63		0.00	335.40			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 23.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 5 9-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 * (PPM)	NO ** (PPM)	NO2 (PPM)	NOX ** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.055	0.006	0.018	0.025	1.30	0.25	1.05	0.88				
1.63	0.043	0.006	0.015	0.021	1.23	0.26	0.97	0.78				
2.63	0.034	0.005	0.013	0.018	1.15	0.25	0.90	0.68				
3.63	0.027	0.004	0.012	0.016	1.14	0.27	0.86	0.55				
4.63	0.021	0.004	0.011	0.015	1.21	0.29	0.92	0.51				
5.63	0.015	0.004	0.010	0.014	1.04	0.27	0.77	0.46				0
6.63	0.013	0.005	0.009	0.014								
7.63	0.012	0.006	0.011	0.017	1.00	0.29	0.71	0.44				
8.63	0.022	0.009	0.013	0.021	0.99	0.26	0.72	0.44	0.028	0.007	0.053	
9.63	0.051	0.011	0.014	0.025	0.96	0.25	0.71	0.43				
10.63	0.096	0.015	0.016	0.031	0.91	0.26	0.64	0.49				
11.63	0.137	0.015	0.017	0.032	0.89	0.26	0.63	0.52				
12.63	0.171	0.019	0.019	0.039	0.81	0.25	0.56	0.54				
13.63	0.181	0.017	0.020	0.037	0.90	0.28	0.62	0.56				
14.63	0.194	0.018	0.021	0.040	0.88	0.29	0.60	0.59	0.155	0.012	0.051	
15.63	0.203	0.014	0.019	0.033								
16.63	0.194	0.014	0.020	0.034								
17.63	0.181	0.009	0.018	0.027	0.91	0.34	0.57	0.61				
18.63	0.171	0.005	0.016	0.021	0.97	0.34	0.63	0.60				
19.63	0.160	0.004	0.014	0.018	0.99	0.33	0.66	0.60				0
20.63	0.152	0.002	0.013	0.015	0.90	0.24	0.66	0.58				
21.63		0.001	0.012	0.013	1.01	0.35	0.65	0.63				
22.63		0.001	0.011	0.012	1.01	0.37	0.64	0.63				
23.63		0.000	0.011	0.011	1.03	0.39	0.64	0.63				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	16.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.6	0.00	0.00			
5.63		0.00	0.00			
6.63		0.05	1.90	39.93		6.17
7.63	16.1	0.12	7.56			
8.63		0.47	28.06			
9.63		1.01	76.78			
10.63	21.1	0.33	111.54			
11.63		1.07	159.46			
12.63		0.67	208.46			
13.63	24.4	1.04	262.72			
14.63		0.29	296.62			
15.63		0.05	304.90			
16.63	26.1	0.00	306.00			
17.63		0.00	306.00			
18.63		0.00	306.00			
19.63	20.0	0.00	306.00			
20.63		0.00	306.00			
21.63		0.00	306.00			
22.63	17.2	0.00	306.00			
23.63		0.00	306.00			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75

** The apparent increase of [NO] and [NO_x]is probably due to thermal zero drift in the instrument

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 10- 1-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOx: 10.0 PPMC/1.00 PPM

TIME (EST)	O3* (PPM)	NO *** (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63		0.000	0.010	0.010	1.05	0.37	0.69	0.61				
1.63		0.000	0.010	0.010	1.07	0.40	0.67	0.61				
2.63		0.000	0.010	0.010	1.08	0.41	0.67	0.63				
3.63		0.000	0.010	0.010	1.09	0.41	0.68	0.63				
4.63		0.000	0.010	0.010	1.07	0.40	0.67	0.59				
5.63		0.000	0.009	0.009	1.08	0.39	0.69	0.61				
6.63		0.000	0.009	0.009	1.07	0.40	0.67	0.60				
7.63	0.085	0.000	0.009	0.009	1.07	0.38	0.69	0.56				
8.63	0.078	0.000	0.009	0.009	1.06	0.40	0.67	0.60	0.038 **	0.004	0.020	
9.63	0.083	0.002	0.011	0.013	1.01	0.38	0.63	0.62				
10.63	0.086	0.003	0.011	0.014	0.97	0.31	0.66	0.51				
11.63	0.099	0.004	0.014	0.018	1.00	0.39	0.61	0.60				
12.63	0.119	0.005	0.015	0.020	0.96	0.38	0.59	0.64				
13.63	0.147	0.006	0.017	0.024	0.93	0.38	0.55	0.65	0.099	0.019	0.029	
14.63	0.157	0.007	0.016	0.024	0.98	0.33	0.65	0.63				
15.63	0.152	0.005	0.017	0.022	0.93	0.34	0.58	0.60				
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.6	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	15.0	0.11	5.98			
8.63		0.28	19.04			
9.63		0.67	50.66			
10.63	21.7	0.78	95.04			
11.63		0.72	139.56			
12.63		1.00	193.40			
13.63	25.6	0.53	235.54			
14.63		0.37	261.26			
15.63		0.19	276.62			
16.63	24.4	0.05	282.70			
17.63		0.02	284.56			
18.63		0.00	285.00			
19.63	20.6	0.00	285.00			
20.63		0.00	285.00			
21.63		0.00	285.00			
22.63	17.8	0.00	285.00			

% POSSIBLE MINUTES OF SUNSHINE 52

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75

** Data suspect but retained.

*** The apparent increase of [NO] is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 9-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000	1.57	1.23	0.35	0.03				
1.80	0.000	0.000	0.000	0.000	1.58	1.25	0.33	0.00				
2.80	0.000	0.001	0.052	0.053	1.59	1.23	0.36	0.00				
3.80	0.000	0.196	0.048	0.244	4.31	1.21	3.10	11.52				
4.80	0.000	0.193	0.048	0.241	4.82	1.20	3.62	11.52				
5.80	0.000	0.193	0.048	0.241	4.70	1.05	3.65	11.52				0
6.80	0.000	0.171	0.046	0.217	4.58	1.20	3.38	10.66				
7.80	0.000	0.126	0.062	0.188	4.10	1.15	2.96	9.41				
8.80	0.080	0.041	0.113	0.154	3.61	1.10	2.51	7.97				
9.80	0.117	0.011	0.111	0.122	3.19	1.06	2.13	6.98	0.089	0.107	0.040	
10.80	0.198	0.013	0.084	0.097	2.82	1.01	1.81	6.00				
11.80	0.286	0.015	0.062	0.077	2.48	0.97	1.51	5.17				
12.80	0.318	0.016	0.047	0.063	2.27	0.91	1.36	4.43				980
13.80	0.290	0.017	0.036	0.053	2.09	0.89	1.20	3.84	0.276	0.014	0.042	
14.80	0.236	0.011	0.029	0.040	1.94	0.89	1.05	3.27				
15.80	0.188	0.011	0.025	0.035	1.85	0.86	0.99	2.77				
16.80	0.150	0.006	0.019	0.026	1.78	0.87	0.91	2.38				
17.80	0.121	0.005	0.017	0.022	1.73	0.89	0.83	2.06				
18.80	0.098	0.004	0.014	0.018	1.67	0.89	0.78	1.74				
19.80	0.081	0.005	0.011	0.016	1.60	0.88	0.72	1.53				
20.80	0.064	0.005	0.010	0.015	1.56	0.90	0.66	1.33				
21.80	0.054	0.005	0.010	0.015	1.51	0.89	0.62	1.16				0
22.80	0.043	0.005	0.007	0.013	1.50	0.90	0.59	0.99				
23.80	0.033	0.006	0.006	0.013	1.49	0.90	0.59	0.89				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	13.3	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	12.8	0.00	0.00			
5.80		0.00	0.00			
6.80		0.06	2.88	65.70	6.17	
7.80	13.3	0.27	16.56			
8.80		0.54	45.72			
9.80		0.69	85.32			
10.80	21.1	0.95	139.20			
11.80		1.08	202.44			
12.80		0.99	262.92			
13.80	21.7	0.68	307.44			
14.80		0.25	327.60			
15.80		0.66	362.28			
16.80	19.4	0.02	371.16			
17.80		0.00	371.40			
18.80		0.00	371.40			
19.80	17.2	0.00	371.40			
20.80		0.00	371.40			
21.80		0.00	371.40			
22.80	16.7	0.00	371.40			
23.80		0.00	371.40			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 23.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 9-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 * (PPM)	NO ** (PPM)	NO2 (PPM)	NOX ** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.026	0.006	0.006	0.013	1.47	0.91	0.56	0.78				
1.80	0.021	0.006	0.005	0.012	1.46	0.91	0.55	0.67				
2.80	0.015	0.005	0.005	0.011	1.43	0.94	0.50	0.60				
3.80	0.012	0.004	0.004	0.009	1.44	1.03	0.42	0.51				
4.80	0.009	0.004	0.004	0.009	1.43	1.02	0.41	0.43				
5.80	0.005	0.004	0.004	0.009	1.47	1.02	0.46	0.37				0
6.80	0.003	0.003	0.003	0.006								
7.80	0.003	0.007	0.005	0.013	1.42	1.02	0.41	0.37				
8.80	0.010	0.010	0.006	0.016	1.40	0.98	0.42	0.36	0.012	0.005	0.021	
9.80	0.029	0.013	0.006	0.019	1.36	0.98	0.39	0.35				
10.80	0.055	0.019	0.009	0.028	1.34	0.97	0.37	0.36				
11.80	0.074	0.020	0.009	0.029	1.32	0.93	0.39	0.38				
12.80	0.096	0.021	0.010	0.031	1.34	0.96	0.38	0.42				
13.80	0.103	0.021	0.011	0.032	1.35	0.97	0.38	0.43				
14.80	0.108	0.021	0.011	0.032	1.33	1.01	0.32	0.44	0.090	0.006	0.019	
15.80	0.109	0.016	0.011	0.027	1.19	0.86	0.33	0.45				
16.80	0.104	0.016	0.009	0.025	1.35	1.01	0.34	0.45				
17.80	0.095	0.007	0.009	0.016	1.37	1.03	0.34	0.45				
18.80	0.087	0.005	0.007	0.013	1.43	1.00	0.43	0.45				
19.80	0.082	0.003	0.006	0.010	1.45	1.02	0.43	0.44				0
20.80	0.077	0.001	0.006	0.007	1.34	0.90	0.44	0.38				
21.80		0.001	0.006	0.007	1.46	1.03	0.43	0.45				
22.80		0.000	0.005	0.005	1.47	1.00	0.46	0.45				
23.80		0.000	0.004	0.004	1.50	1.02	0.48	0.46				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	16.1	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	15.6	0.00	0.00			
5.80		0.00	0.00			
6.80		0.05	2.40	65.70		6.17
7.80	16.1	0.12	8.76			
8.80		0.47	52.76			
9.80		1.01	86.88			
10.80	21.1	0.33	114.84			
11.80		1.07	170.16			
12.80		0.67	215.16			
13.80	24.4	1.04	273.12			
14.80		0.29	299.52			
15.80		0.05	305.40			
16.80	26.1	0.00	306.00			
17.80		0.00	306.00			
18.80		0.00	306.00			
19.80	20.0	0.00	306.00			
20.80		0.00	306.00			
21.80		0.00	306.00			
22.80	17.2	0.00	306.00			
23.80		0.00	306.00			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75

** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 10- 1-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 * (PPM)	NO** (PPM)	NO2 (PPM)	NOX ** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80		0.000	0.005	0.005	1.50	1.03	0.48	0.45				
1.80		0.000	0.004	0.004	1.51	1.03	0.48	0.43				
2.80		0.000	0.004	0.004	1.53	1.00	0.53	0.42				
3.80		0.000	0.004	0.004	1.52	1.00	0.52	0.44				
4.80		0.000	0.004	0.004	1.51	0.96	0.55	0.42				
5.80		0.000	0.004	0.004	1.51	0.96	0.55	0.42				
6.80		0.000	0.003	0.003	1.51	0.96	0.56	0.45				
7.80	0.039	0.000	0.002	0.002	1.50	0.94	0.56	0.43				
8.80	0.033	0.000	0.002	0.002	1.48	1.04	0.45	0.45	0.047	0.004	0.005	
9.80	0.037	0.004	0.005	0.010	1.46	1.03	0.43	0.45				
10.80	0.043	0.004	0.006	0.011	1.36	0.89	0.47	0.39				
11.80	0.054	0.005	0.006	0.012	1.43	1.00	0.43	0.46				
12.80	0.068	0.007	0.007	0.015	1.39	0.94	0.45	0.46				
13.80	0.086	0.007	0.007	0.015	1.38	0.94	0.45	0.48	0.068	0.009	0.022	
14.80	0.090	0.007	0.007	0.015	1.37	0.94	0.43	0.48				
15.80	0.087	0.007	0.009	0.016	1.37	0.93	0.44	0.43				
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	17.2	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	15.6	0.00	0.00			
5.80		0.00	0.00			
6.80		0.03	1.44			
7.80	15.0	0.11	7.08			
8.80		0.28	21.84			
9.80		0.67	57.36			
10.80	21.7	0.78	102.84			
11.80		0.72	146.76			
12.80		1.00	203.40			
13.80	25.6	0.53	240.84			
14.80		0.37	264.96			
15.80		0.19	278.52			
16.80	24.4	0.05	285.20			
17.80		0.02	284.76			
18.80		0.00	285.00			
19.80	20.6	0.00	285.00			
20.80		0.00	285.00			
21.80		0.00	285.00			
22.80	17.8	0.00	285.00			

% POSSIBLE MINUTES OF SUNSHINE 52

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75

** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 9-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000	1.51	1.15	0.36	0.00				
1.97	0.000	0.000	0.000	0.000	1.50	1.11	0.39	0.00				
2.97	0.000	0.015	0.150	0.165	1.53	1.11	0.42	0.00				
3.97	0.000	0.601	0.143	0.744	5.46	1.10	4.36	10.56				
4.97	0.000	0.586	0.150	0.736	6.02	1.06	4.96	10.56				
5.97	0.000	0.575	0.154	0.729	6.07	1.00	5.07	10.46				140
6.97	0.000	0.499	0.149	0.648	5.69	1.06	4.63	9.50				
7.97	0.000	0.384	0.161	0.545	5.02	1.05	3.97	8.16				
8.97	0.001	0.225	0.225	0.449	4.36	0.99	3.37	6.91				
9.97	0.017	0.087	0.279	0.366	3.75	0.94	2.81	5.95	0.059	*	0.002	
10.97	0.077	0.041	0.248	0.289	3.23	0.89	2.34	5.00				
11.97	0.147	0.026	0.199	0.225	2.81	0.85	1.96	4.25				
12.97	0.190	0.021	0.152	0.173	2.48	0.82	1.66	3.56				370
13.97	0.198	0.019	0.112	0.132	2.23	0.80	1.43	3.07	0.201	0.105	0.052	
14.97	0.159	0.013	0.079	0.092	2.04	0.81	1.24	2.56				
15.97	0.126	0.012	0.061	0.073	1.92	0.79	1.13	2.18				
16.97	0.096	0.007	0.045	0.052	1.85	0.81	1.03	1.89				
17.97	0.074	0.006	0.033	0.040	1.75	0.81	0.94	1.60				
18.97	0.056	0.004	0.026	0.030	1.67	0.83	0.84	1.30				
19.97	0.043	0.005	0.019	0.025	1.60	0.85	0.75	1.19				
20.97	0.033	0.006	0.016	0.022	1.57	0.86	0.72	1.04				
21.97	0.025	0.005	0.012	0.017	1.51	0.84	0.67	0.88				0
22.97	0.021	0.005	0.010	0.015	1.49	0.85	0.64	0.78				
23.97	0.014	0.006	0.007	0.014	1.46	0.85	0.62	0.69				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	15.3	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	12.8	0.00	0.00			
5.97		0.00	0.00			
6.97		0.06	3.48	58.05	6.17	
7.97	13.3	0.27	19.26			
8.97		0.54	51.12			
9.97		0.69	92.22			
10.97	21.1	0.95	148.70			
11.97		1.08	213.24			
12.97		0.99	272.82			
13.97	21.7	0.68	314.24			
14.97		0.25	330.10			
15.97		0.06	334.08			
16.97	19.4	0.02	335.36			
17.97		0.00	335.40			
18.97		0.00	335.40			
19.97	17.2	0.00	335.40			
20.97		0.00	335.40			
21.97		0.00	335.40			
22.97	16.7	0.00	335.40			
23.97		0.00	335.40			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 23.3 CENT

* Data suspect and discarded

CHAMBER NUMBER 3
DAY 2 OF 3 9-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3* (PPM)	NO** (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.010	0.007	0.007	0.015	1.43	0.86	0.57	0.59				
1.97	0.009	0.007	0.007	0.015	1.41	0.87	0.54	0.51				
2.97	0.008	0.005	0.005	0.011	1.41	0.87	0.54	0.48				
3.97	0.003	0.005	0.006	0.012	1.41	0.96	0.46	0.36				
4.97	0.002	0.005	0.005	0.011	1.41	0.96	0.45	0.33				
5.97	0.001	0.004	0.004	0.009	1.40	0.97	0.43	0.27				0
6.97	0.001	0.004	0.004	0.009	1.34	0.96	0.37	0.33				
7.97	0.003	0.009	0.007	0.016	1.36	0.96	0.40	0.29				
8.97	0.021	0.011	0.006	0.017	1.35	0.92	0.43	0.27	0.014	0.006	0.020	
9.97	0.043	0.018	0.009	0.027	1.34	0.92	0.41	0.30				
10.97	0.077	0.021	0.011	0.032	1.32	0.93	0.39	0.32				
11.97	0.098	0.024	0.011	0.034	1.32	0.92	0.40	0.33				
12.97	0.121	0.025	0.011	0.035	1.33	0.98	0.36	0.39				
13.97	0.127	0.024	0.011	0.034	1.34	0.98	0.37	0.37				
14.97	0.137	0.024	0.011	0.034	1.32	1.03	0.30	0.41	0.115	0.013	0.021	
15.97	0.136	0.020	0.011	0.031	1.26	0.96	0.30	0.44				
16.97	0.128	0.018	0.011	0.029	1.40	1.03	0.37	0.45				
17.97	0.116	0.010	0.010	0.019	1.41	1.09	0.52	0.45				
18.97	0.108	0.005	0.006	0.012	1.45	1.07	0.38	0.43				0
19.97	0.104	0.003	0.007	0.011	1.48	1.05	0.43	0.44				
20.97	0.098	0.001	0.005	0.006	1.44	1.06	0.38	0.46				
21.97		0.001	0.006	0.007	1.50	1.06	0.44	0.43				
22.98		0.000	0.006	0.006	1.51	1.05	0.46	0.43				
23.97		0.000	0.005	0.005	1.53	1.05	0.48	0.39				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	16.1	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	15.6	0.00	0.00			
5.97		0.00	0.00			
6.97		0.05	2.90	58.05		6.17
7.97	16.1	0.17	12.86			
8.97		0.47	40.46			
9.97		1.01	99.98			
10.97	21.1	0.53	121.14			
11.97		1.07	183.86			
12.97		0.67	224.86			
13.97	24.4	1.04	286.52			
14.97		0.29	305.42			
15.97		0.05	308.90			
16.97	26.1	0.00	309.00			
17.97		0.00	309.00			
18.97		0.00	309.00			
19.97	20.0	0.00	309.00			
20.97		0.00	309.00			
21.97		0.00	309.00			
22.98	17.2	0.00	309.00			
23.97		0.00	309.00			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75.

** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 10- 1-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 * (PPM)	NO *** (PPM)	NO2 (PPM)	NOX *** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97		0.000	0.005	0.005	1.54	1.04	0.49	0.41				
1.97		0.000	0.004	0.004	1.54	1.04	0.49	0.41				
2.97		0.000	0.005	0.005	1.55	1.05	0.50	0.41				
3.97		0.000	0.005	0.005	1.54	1.04	0.49	0.41				
4.97		0.000	0.004	0.004	1.54	1.00	0.54	0.39				
5.97		0.000	0.004	0.004	1.55	1.00	0.55	0.38				
6.97		0.000	0.004	0.004	1.54	0.99	0.55	0.37				
7.97	0.050	0.000	0.003	0.003	1.53	0.97	0.56	0.40				
8.97	0.044	0.001	0.003	0.004	1.55	1.07	0.48	0.40	**	0.004	0.004	
9.97	0.054	0.004	0.006	0.011	1.57	1.09	0.48	0.47				
10.97	0.062	0.005	0.006	0.012	1.47	1.06	0.40	0.46				
11.97	0.074	0.006	0.007	0.014	1.47	1.08	0.40	0.45				
12.97	0.096	0.009	0.009	0.017	1.46	1.00	0.45	0.45				
13.97	0.109	0.010	0.009	0.018	1.47	1.04	0.42	0.46	**	0.009	0.017	
14.97	0.111	0.010	0.010	0.019	1.47	1.02	0.44	0.47				
15.97	0.108	0.009	0.010	0.018	1.47	1.06	0.40	0.48				
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	17.2	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	15.6	0.00	0.00			
5.97		0.00	0.00			
6.97		0.03	1.74			
7.97	15.0	0.11	8.18			
8.97		0.28	24.64			
9.97		0.67	64.06			
10.97	21.7	0.78	110.64			
11.97		0.72	153.96			
12.97		1.00	213.40			
13.97	25.6	0.53	246.14			
14.97		0.37	268.66			
15.97		0.19	280.42			
16.97	24.4	0.05	283.70			
17.97		0.02	284.96			
18.97		0.00	285.00			
19.97	20.6	0.00	285.00			
20.97		0.00	285.00			
21.97		0.00	285.00			
22.97	17.8	0.00	285.00			

% POSSIBLE MINUTES OF SUNSHINE 52

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST 1 Oct 75.

** Data Suspect and Discarded

*** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 9-29-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000	0.88	0.37	0.51	0.10				
1.13	0.000	0.000	0.000	0.000	0.85	0.35	0.50	0.03				
2.13	0.000	0.000	0.000	0.000	0.85	0.35	0.50	0.06				
3.13	0.000	0.000	0.022	0.022	0.90	0.36	0.54	0.15				
4.13	0.000	0.086	0.021	0.107	1.47	0.36	1.11	12.38				130
5.13	0.000	0.086	0.019	0.105	1.58	0.34	1.24	12.38				
6.13	0.000	0.086	0.019	0.105	1.57	0.37	1.20	17.29				
7.13	0.000	0.075	0.017	0.092	1.50	0.38	1.12	10.66				
8.13	0.001	0.059	0.019	0.078	1.34	0.31	1.03	9.31				
9.13	0.005	0.043	0.028	0.071	1.16	0.25	0.91	7.78	0.021	0.030	0.014	
10.13	0.014	0.027	0.034	0.061	1.04	0.22	0.82	6.71				
11.13	0.037	0.024	0.032	0.056	0.91	0.21	0.70	5.66				1340
12.13	0.056	0.021	0.028	0.049	0.86	0.23	0.63	4.83				
13.13	0.070	0.022	0.022	0.045	0.79	0.20	0.59	4.07	0.072	0.024	0.029	
14.13	0.066	0.019	0.019	0.039	0.77	0.24	0.53	3.46				
15.13	0.054	0.015	0.015	0.030	0.75	0.24	0.51	2.94				
16.13	0.043	0.014	0.014	0.028	0.71	0.24	0.48	2.50				
17.13	0.033	0.007	0.011	0.018	0.70	0.25	0.46	2.14				
18.13	0.025	0.007	0.010	0.017	0.69	0.25	0.44	1.82				
19.13	0.019	0.006	0.007	0.014	0.68	0.21	0.47	1.46				
20.13	0.013	0.005	0.005	0.011	0.67	0.24	0.43	1.35				0
21.13	0.010	0.006	0.005	0.012	0.64	0.21	0.43	1.15				
22.13	0.008	0.007	0.005	0.013	0.63	0.20	0.43	1.01				
23.13	0.003	0.006	0.004	0.011	0.62	0.20	0.41	0.85				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	13.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	12.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.06	0.48	62.58	6.17	
7.13	13.3	0.27	5.76			
8.13		0.54	24.12			
9.13		0.69	57.72			
10.13	21.1	0.95	101.20			
11.13		1.08	159.24			
12.13		0.99	223.32			
13.13	21.7	0.68	280.24			
14.13		0.25	317.60			
15.13		0.06	331.08			
16.13	19.4	0.02	334.56			
17.13		0.00	335.40			
18.13		0.00	335.40			
19.13	17.2	0.00	335.40			
20.13		0.00	335.40			
21.13		0.00	335.40			
22.13	16.7	0.00	335.40			
23.13		0.00	335.40			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 23.3 CENT

CHAMBER NUMBER 4
DAY 2 OF 3 9-30-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3* (PPM)	NO ** (PPM)	NO2 (PPM)	NOX ** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.002	0.009	0.002	0.011	0.62	0.19	0.43	0.76				
1.13	0.001	0.009	0.002	0.011	0.59	0.21	0.38	0.66				
2.13	0.001	0.009	0.002	0.011	0.58	0.20	0.38	0.58				
3.13	0.000	0.005	0.002	0.007	0.60	0.20	0.39	0.49				
4.13	0.000	0.005	0.001	0.006	0.60	0.20	0.39	0.42				
5.13	0.000	0.004	0.002	0.006	0.61	0.22	0.38	0.36				150
6.13	0.000	0.004	0.001	0.005	0.59	0.22	0.37	0.31				
7.13	0.000	0.007	0.001	0.009	0.60	0.28	0.31	0.37				
8.13	0.000	0.010	0.002	0.012	0.59	0.22	0.37	0.33	0.006	0.005	0.021	
9.13	0.009	0.015	0.003	0.018	0.59	0.17	0.42	0.29				
10.13	0.021	0.019	0.004	0.024	0.54	0.19	0.35	0.29				
11.13	0.034	0.021	0.005	0.027	0.54	0.21	0.33	0.29				
12.13	0.044	0.027	0.005	0.032	0.55	0.22	0.34	0.33				
13.13	0.054	0.027	0.005	0.032	0.55	0.23	0.32	0.35				
14.13	0.056	0.029	0.006	0.035	0.58	0.23	0.35	0.36	0.052	0.009	0.022	
15.13	0.062	0.025	0.005	0.030	0.58	0.26	0.32	0.36				
16.13	0.061	0.024	0.005	0.029	0.62	0.30	0.32	0.45				
17.13	0.055	0.019	0.005	0.025	0.64	0.24	0.40	0.41				
18.13	0.051	0.010	0.005	0.015	0.71	0.24	0.47	0.37				
19.13	0.046	0.005	0.005	0.011	0.75	0.25	0.50	0.37				0
20.13	0.043	0.004	0.004	0.009	0.78	0.25	0.53	0.36				
21.13	0.040	0.002	0.004	0.006	0.80	0.33	0.47	0.44				
22.13 *		0.001	0.004	0.005	0.81	0.26	0.55	0.37				
23.13		0.000	0.004	0.004	0.81	0.26	0.55	0.36				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	16.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.05	0.40	62.58		6.17
7.13	16.1	0.17	4.36			
8.13		0.47	16.96			
9.13		1.01	49.48			
10.13	21.1	0.33	104.64			
11.13		1.07	130.56			
12.13		0.67	191.56			
13.13	24.4	1.04	234.52			
14.13		0.29	290.92			
15.13		0.05	306.40			
16.13	26.1	0.00	309.00			
17.13		0.00	309.00			
18.13		0.00	309.00			
19.13	20.0	0.00	309.00			
20.13		0.00	309.00			
21.13		0.00	309.00			
22.13	17.2	0.00	309.00			
23.13		0.00	309.00			

% POSSIBLE MINUTES OF SUNSHINE 71

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75.

** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 10- 1-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 * (PPM)	NO *** (PPM)	NO2 (PPM)	NOX *** (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13		0.000	0.003	0.003	0.82	0.27	0.55	0.37				
1.13		0.000	0.003	0.003	0.83	0.27	0.56	0.36				
2.13		0.000	0.003	0.003	0.83	0.27	0.56	0.38				
3.13		0.000	0.003	0.003	0.84	0.26	0.58	0.36				
4.13		0.000	0.003	0.003	0.84	0.24	0.59	0.38				
5.13		0.000	0.002	0.002	0.86	0.27	0.58	0.35				
6.13		0.000	0.002	0.002	0.86	0.24	0.62	0.33				
7.13		0.000	0.002	0.002	0.85	0.24	0.60	0.33				
8.13	0.014	0.000	0.002	0.002	0.84	0.27	0.57	0.36	0.039 **	0.003	0.015	
9.13	0.018	0.002	0.002	0.004	0.86	0.27	0.58	0.38				
10.13	0.021	0.004	0.004	0.009	0.83	0.31	0.52	0.38				
11.13	0.032	0.006	0.004	0.011	0.82	0.32	0.50	0.41				
12.13	0.040	0.007	0.005	0.013	0.82	0.30	0.51	0.39				
13.13	0.055	0.011	0.004	0.015	0.80	0.28	0.52	0.39	0.042	0.020	0.016	
14.13	0.064	0.011	0.004	0.015	0.82	0.28	0.54	0.39				
15.13	0.064	0.011	0.007	0.018	0.82	0.34	0.48	0.36				
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	15.0	0.11	2.68			
8.13		0.28	10.64			
9.13		0.67	30.56			
10.13	21.7	0.78	71.64			
11.13		0.72	117.96			
12.13		1.00	165.40			
13.13	25.6	0.53	219.64			
14.13		0.37	250.16			
15.13		0.19	270.92			
16.13	24.4	0.05	281.20			
17.13		0.02	283.96			
18.13		0.00	285.00			
19.13	20.6	0.00	285.00			
20.13		0.00	285.00			
21.13		0.00	285.00			
22.13	17.8	0.00	285.00			

% POSSIBLE MINUTES OF SUNSHINE 52

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Ozone strip chart recorder malfunction between 2208 EST, 30 Sept 75 and 0838 EST, 1 Oct 75.

** Data suspect but retained.

*** The apparent increase of [NO] and [NO_x] is probably due to thermal zero drift in the instrument.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 10- 8-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.004	0.004	1.44	1.38	0.06	0.00				
1.47	0.002	0.000	0.004	0.004	1.48	1.20	0.29	0.00				
2.47	0.002	0.000	0.003	0.003	1.56	1.55	0.01	1.26				
3.47	0.001	0.000	0.202	0.202	3.46	1.63	1.82	10.10				
4.47	0.000	0.788	0.203	0.991	11.11	1.61	9.51	10.10				
5.47	0.000	0.779	0.204	0.983	11.97	1.48	10.49	10.10				
6.47	0.000	0.764	0.218	0.982	12.54	1.62	10.92	10.24				0
7.47	0.000	0.749	0.229	0.978	12.54	1.61	10.93	10.32				
8.47	0.000	0.681	0.267	0.949	11.76	1.63	10.13	10.02				
9.47	0.000	0.513	0.373	0.887	11.30	1.67	9.63	9.58				
10.47	0.000	0.293	0.530	0.824	10.97	1.71	9.26	9.21				
11.47	0.105	0.005	0.706	0.711	10.30	1.73	8.57	8.84				
12.47	0.267	0.000	0.571	0.571	9.78	1.72	8.06	8.40				
13.47	0.348	0.000	0.420	0.420	9.01	1.68	7.32	8.11				
14.47	0.413	0.000	0.307	0.307	8.48	1.66	6.83	7.74				
15.47	0.405	0.000	0.229	0.229	8.06	1.59	6.46	7.44	0.526	0.055	0.299	0
16.47	0.399	0.000	0.197	0.197								
17.47	0.351	0.000	0.175	0.175	7.03	1.41	5.62	6.35				
18.47	0.308	0.000	0.160	0.160	6.75	1.39	5.36	6.04				
19.47	0.273	0.000	0.148	0.148	6.40	1.28	5.12	5.63				
20.47	0.242	0.000	0.139	0.139	6.18	1.32	4.86	5.49	0.420	0.044	0.281	
21.47	0.218	0.000	0.139	0.139	5.80	1.11	4.69	5.15				
22.47	0.196	0.000	0.122	0.122	5.66	1.29	4.37	5.08				0
23.47	0.186	0.000	0.114	0.114	5.41	1.25	4.17	4.73				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	16.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.6	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	15.6	0.12	5.16			
8.47		0.16	13.48	19.54	8.00	
9.47		0.29	26.72			
10.47	18.9	0.38	46.64			
11.47		0.34	68.32			
12.47		0.28	87.04			
13.47	21.1	0.27	103.56			
14.47		0.22	118.36			
15.47		0.23	131.84			
16.47	21.7	0.11	142.28			
17.47		0.03	146.64			
18.47		0.00	147.60			
19.47	19.4	0.00	147.60			
20.47		0.00	147.60			
21.47		0.00	147.60			
22.47	20.0	0.00	147.60			
23.47		0.00	147.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 10- 9-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.158	0.000	0.107	0.107	5.22	1.25	3.97	5.21				
1.47	0.143	0.000	0.102	0.102	5.00	1.23	3.77	4.39				
2.47	0.129	0.000	0.096	0.096	4.79	1.18	3.61	4.13				
3.47	0.118	0.000	0.091	0.091	4.64	1.18	3.46	3.93				
4.47	0.107	0.000	0.087	0.087	4.44	1.10	3.34	3.77				
5.47	0.096	0.000	0.082	0.082	4.30	1.10	3.20	3.64				
6.47	0.088	0.000	0.079	0.079	4.17	1.04	3.12	3.57				0
7.47	0.079	0.000	0.075	0.075	3.97	1.02	2.95	3.42				
8.47	0.075	0.000	0.073	0.073	3.89	1.02	2.87	3.29				
9.47	0.075	0.000	0.073	0.073	3.80	0.80	3.00	2.91				
10.47	0.089	0.000	0.073	0.073	3.91	0.98	2.92	3.35	0.080	0.017	0.127	
11.47	0.109	0.000	0.073	0.073	3.87	1.00	2.87	3.32				
12.47	0.117	0.000	0.071	0.071								
13.47	0.119	0.000	0.071	0.071	3.81	1.01	2.80	3.33				
14.47	0.128	0.000	0.070	0.070	3.77	1.00	2.77	3.36				
15.47	0.136	0.000	0.068	0.068	3.66	0.81	2.85	3.20				
16.47	0.150	0.000	0.068	0.068	3.77	0.96	2.81	3.40				
17.47	0.155	0.000	0.067	0.067	3.68	0.99	2.70	3.33				
18.47	0.149	0.000	0.063	0.063	3.68	1.01	2.67	3.32	0.057	0.009	0.070	
19.47	0.137	0.000	0.059	0.059	3.67	1.02	2.65	3.29				
20.47	0.130	0.000	0.058	0.058	3.65	1.01	2.64	3.41				
21.47	0.121	0.000	0.056	0.056	3.65	1.04	2.60	3.20				
22.47	0.116	0.000	0.053	0.053	3.64	1.03	2.60	3.17				
23.47	0.109	0.000	0.052	0.052	3.63	1.03	2.59	3.19				

% POSSIBLE MINUTES OF SUNSHINE 26

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	19.4	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.9	0.00	0.00			
5.47		0.00	0.00			
6.47		0.05	1.40			
7.47	17.8	0.10	5.80			
8.47		0.22	15.16	19.54		8.00
9.47		0.33	31.44			
10.47	20.0	0.28	49.84			
11.47		0.27	66.36			
12.47		0.28	82.84			
13.47	20.0	0.31	100.48			
14.47		0.35	120.20			
15.47		0.29	139.52			
16.47	21.1	0.23	155.24			
17.47		0.06	164.28			
18.47		0.00	166.20			
19.47	16.7	0.00	166.20			
20.47		0.00	166.20			
21.47		0.00	166.20			
22.47	15.6	0.00	166.20			
23.47		0.00	166.20			

CHAMBER NUMBER 1
DAY 3 OF 5 10-10-75

URBAN MIX 59% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.104	0.000	0.052	0.052	3.60	1.04	2.56	3.16				
1.47	0.096	0.000	0.051	0.051	3.63	1.05	2.58	3.29				
2.47	0.088	0.000	0.050	0.050	3.60	1.05	2.55	3.23				
3.47	0.080	0.000	0.049	0.049	3.58	1.05	2.54	3.25				
4.47	0.073	0.000	0.048	0.048	3.50	0.90	2.59	3.15				0
5.47	0.066	0.000	0.046	0.046	3.57	1.03	2.54	3.18				
6.47	0.059	0.000	0.045	0.045	3.55	0.99	2.56	3.21				
7.47	0.053	0.000	0.044	0.044	3.48	0.89	2.59	3.14				
8.47	0.047	0.000	0.047	0.047	3.53	1.03	2.50	3.17				
9.47	0.047	0.000	0.049	0.049	3.47	1.02	2.44	3.12				
10.47	0.061	0.000	0.050	0.050	3.55	1.04	2.52	3.37	0.057	0.014	0.090	
11.47	0.081	0.000	0.051	0.051	3.51	1.06	2.45	3.37				
12.47	0.107	0.000	0.052	0.052	3.45	1.04	2.41	3.37				
13.47	0.137	0.000	0.053	0.053	3.31	0.88	2.43	3.30				
14.47	0.178	0.000	0.055	0.055	3.40	1.04	2.36	3.51				
15.47	0.209	0.000	0.055	0.055	3.36	1.06	2.30	3.44	0.183	0.015	0.087	
16.47	0.226	0.000	0.053	0.053								
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	16.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	16.1	0.00	0.00			
5.47		0.00	0.00			
6.47		0.02	0.56			
7.47	16.1	0.09	3.72			
8.47		0.22	12.76			
9.47		0.35	29.60			
10.47	18.9	0.44	53.12			
11.47		0.60	84.00			
12.47		1.13	134.84			
13.47	21.1	0.99	198.72			
14.47		0.78	252.24			
15.47		0.46	290.08			
16.47	23.3	0.22	310.96			
17.47		0.06	319.68			
18.47		0.00	321.60			
19.47	17.8	0.00	321.60			
20.47		0.00	321.60			
21.47		0.00	321.60			
22.47	15.6	0.00	321.60			
23.47		0.00	321.60			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 10- 8-75

URBAN MIX 59% DILUTION
TARGET INITIAL HC/NOx: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.002	0.002								
1.63	0.000	0.000	0.016	0.016	1.15	1.14	0.01	0.00				
2.63	0.000	0.000	0.016	0.016								
3.63	0.000	0.011	0.048	0.059								
4.63	0.000	0.174	0.050	0.225	4.29	1.31	2.99	11.57				
5.63	0.000	0.175	0.050	0.226	4.23	1.15	3.08	11.50				
6.63	0.000	0.174	0.049	0.224	4.91	1.40	3.51	11.65				0
7.63	0.000	0.172	0.051	0.224	4.89	1.34	3.55	11.57				
8.63	0.000	0.147	0.070	0.216	4.84	1.41	3.43	11.57				
9.63	0.001	0.080	0.127	0.207	4.65	1.42	3.23	11.20				
10.63	0.042	0.003	0.184	0.187	4.45	1.42	3.03	10.91				
11.63	0.161	0.000	0.166	0.166	4.20	1.38	2.82	10.54				
12.63	0.220	0.000	0.140	0.140	4.02	1.34	2.68	10.10				
13.63	0.257	0.000	0.114	0.114	3.99	1.30	2.69	9.80				
14.63	0.278	0.000	0.096	0.096	3.70	1.24	2.46	9.43	0.215	0.019	0.106	0
15.63	0.275	0.000	0.081	0.081	3.58	1.23	2.35	9.21				
16.63	0.270	0.000	0.072	0.072	3.34	1.10	2.23	8.68				
17.63	0.247	0.000	0.067	0.067	3.20	1.12	2.08	8.15				
18.63	0.228	0.000	0.060	0.060	3.12	1.07	2.04	7.62				
19.63	0.210	0.000	0.055	0.055	2.92	0.87	2.05	7.20	0.185	0.014	0.130	
20.63	0.196	0.000	0.052	0.052	2.93	1.04	1.89	7.13				
21.63	0.191	0.000	0.049	0.049	2.74	0.84	1.90	6.72				0
22.63	0.168	0.000	0.047	0.047	2.77	1.03	1.74	6.59				
23.63	0.158	0.000	0.045	0.045	2.67	1.04	1.63	6.38				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	16.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.6	0.00	0.00			
5.63		0.03	1.14			
6.63		0.12	6.56			
7.63	15.6	0.16	15.08			
8.63		0.29	29.62	9.06	8.00	
9.63		0.38	50.44			
10.63	18.9	0.34	71.72			
11.63		0.27	89.46			
12.63		0.26	105.28			
13.63	21.1	0.22	119.56			
14.63		0.23	132.94			
15.63		0.11	142.18			
16.63	21.7	0.03	145.74			
17.63		0.00	146.40			
18.63		0.00	146.40			
19.63	19.4	0.00	146.40			
20.63		0.00	146.40			
21.63		0.00	146.40			
22.63	20.0	0.00	146.40			
23.63		0.00	146.40			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 72.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 5 10- 9-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.148	0.000	0.043	0.043	2.60	1.03	1.57	6.04				
1.63	0.139	0.000	0.040	0.040	2.51	1.01	1.50	5.83				
2.63	0.128	0.000	0.039	0.039	2.45	1.01	1.44	5.69				
3.63	0.122	0.000	0.037	0.037	2.37	1.00	1.37	5.48				
4.63	0.112	0.000	0.035	0.035	2.32	1.00	1.33	5.27				
5.63	0.107	0.000	0.033	0.033	2.26	0.94	1.32	5.13				
6.63	0.101	0.000	0.032	0.032	2.23	0.94	1.29	4.99				0
7.63	0.094	0.000	0.030	0.030	2.16	0.92	1.23	4.83				
8.63	0.089	0.000	0.030	0.030	2.15	0.94	1.20	4.75				
9.63	0.088	0.000	0.030	0.030	2.08	0.77	1.31	4.64	0.084	0.009	0.068	
10.63	0.090	0.000	0.030	0.030	2.14	0.91	1.23	4.73				
11.63	0.095	0.000	0.030	0.030	2.14	0.93	1.21	4.73				
12.63	0.097	0.000	0.029	0.029								
13.63	0.097	0.000	0.029	0.029	2.13	0.97	1.16	4.74				
14.63	0.101	0.000	0.030	0.030	2.11	0.92	1.19	4.65				
15.63	0.105	0.000	0.030	0.030	2.00	0.72	1.28	4.54				
16.63	0.112	0.000	0.030	0.030	2.14	0.92	1.22	4.62				
17.63	0.113	0.000	0.031	0.031	2.07	0.95	1.12	4.60	0.065	0.006	0.048	
18.63	0.109	0.000	0.028	0.028	2.05	0.94	1.10	4.52				
19.63	0.103	0.000	0.027	0.027	2.06	0.95	1.11	4.47				
20.63	0.096	0.000	0.026	0.026	2.07	0.93	1.15	4.43				
21.63	0.093	0.000	0.026	0.026	2.08	0.95	1.13	4.41				
22.63	0.089	0.000	0.025	0.025	2.07	1.04	1.03	4.37				
23.63	0.086	0.000	0.024	0.024	2.06	0.94	1.12	4.38				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	19.4	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.9	0.00	0.00			
5.63		0.00	0.00			
6.63		0.05	1.90			
7.63	17.8	0.10	6.80			
8.63		0.22	17.36	9.06		8.00
9.63	20.0	0.33	34.74			
10.63		0.28	52.64			
11.63		0.27	69.06			
12.63		0.28	85.64			
13.63	20.0	0.31	103.58			
14.63		0.35	123.70			
15.63		0.29	142.42			
16.63	21.1	0.23	157.54			
17.63		0.06	164.88			
18.63		0.00	166.20			
19.63	16.7	0.00	166.20			
20.63		0.00	166.20			
21.63		0.00	166.20			
22.63	15.6	0.00	166.20			
23.63		0.00	166.20			

% POSSIBLE MINUTES OF SUNSHINE 26

ADJ AIRPORT MAXIMUM TEMPERATURE 72.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 10-10-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.083	0.000	0.025	0.025	2.05	0.95	1.10	4.31				
1.63	0.079	0.000	0.025	0.025	2.03	0.99	1.03	4.48				
2.63	0.075	0.000	0.026	0.026								
3.63	0.068	0.000	0.025	0.025	2.02	0.97	1.05	4.38				
4.63	0.064	0.000	0.024	0.024	2.02	0.92	1.10	4.39				0
5.63	0.059	0.000	0.022	0.022	2.05	0.95	1.09	4.34				
6.63	0.053	0.000	0.022	0.022	2.03	0.92	1.11	4.31				
7.63	0.049	0.000	0.022	0.022	2.02	0.87	1.14	4.29				
8.63	0.045	0.000	0.026	0.026	2.12	0.93	1.19	4.66				
9.63	0.043	0.000	0.027	0.027	1.98	0.97	1.01	4.23	0.047	0.008	0.055	
10.63	0.050	0.000	0.027	0.027	2.02	1.01	1.01	4.58				
11.63	0.052	0.000	0.027	0.027	2.10	0.97	1.13	4.45				
12.63	0.080	0.000	0.027	0.027	2.02	1.00	1.02	4.38				
13.63	0.099	0.000	0.028	0.028	1.98	0.90	1.08	4.44				
14.63	0.128	0.000	0.029	0.029	1.96	1.01	0.95	4.45	0.152	0.011	0.056	
15.63	0.150	0.000	0.030	0.030	1.98	1.01	0.97	4.52				
16.63	0.160	0.000	0.030	0.030								
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	16.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.1	0.00	0.00			
5.63		0.00	0.00			
6.63		0.02	0.76			
7.63	16.1	0.09	4.62			
8.63		0.22	14.96			
9.63		0.35	55.10			
10.63	18.9	0.44	57.52			
11.63		0.60	90.00			
12.63		1.13	146.14			
13.63	21.1	0.99	208.62			
14.63		0.78	260.04			
15.63		0.46	294.68			
16.63	23.3	0.22	315.16			
17.63		0.06	320.28			
18.63		0.00	321.60			
19.63	17.8	0.00	321.60			
20.63		0.00	321.60			
21.63		0.00	321.60			
22.63	15.6	0.00	321.60			
23.63		0.00	321.60			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 75.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 1 OF 5 10- 8-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.002	0.002								
1.80	0.000	0.000	0.002	0.002	1.14	1.10	0.04	0.00				
2.80	0.000	0.000	0.002	0.002								
3.80	0.000	0.000	0.141	0.141								
4.80	0.000	0.570	0.140	0.710	5.03	1.24	3.79	10.39				
5.80	0.000	0.565	0.145	0.710	5.65	1.16	4.49	10.39				0
6.80	0.000	0.550	0.149	0.698	6.60	1.30	5.31	10.54				
7.80	0.000	0.538	0.156	0.694	6.56	1.32	5.24	10.54				
8.80	0.000	0.494	0.182	0.676	6.44	1.37	5.07	10.32				
9.80	0.000	0.414	0.234	0.648	6.22	1.39	4.84	9.95				
10.80	0.000	0.290	0.321	0.611	5.92	1.34	4.58	9.58				
11.80	0.009	0.110	0.449	0.559	5.60	1.30	4.30	9.21				
12.80	0.046	0.021	0.486	0.507	5.32	1.32	4.00	8.84				
13.80	0.093	0.000	0.457	0.457	5.08	1.27	3.82	8.55				
14.80	0.135	0.000	0.414	0.414	4.89	1.22	3.67	8.25	0.158	0.211	0.144	0
15.80	0.160	0.000	0.363	0.363	4.65	1.32	3.33	7.96				
16.80	0.180	0.000	0.311	0.311	4.32	1.15	3.18	7.31				
17.80	0.164	0.000	0.255	0.255	4.12	1.15	2.97	6.66				
18.80	0.118	0.000	0.182	0.182	3.86	1.10	2.76	6.17				
19.80	0.079	0.000	0.127	0.127	3.44	0.81	2.63	5.63	0.134	0.158	0.155	
20.80	0.059	0.000	0.099	0.099	3.29	1.00	2.29	5.14				
21.80	0.046	0.000	0.083	0.083	3.11	0.94	2.16	4.80				0
22.80	0.036	0.000	0.073	0.073	2.98	1.06	1.91	4.32				
23.80	0.030	0.000	0.064	0.064	2.84	1.13	1.70	3.19				

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	16.1	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	15.6	0.00	0.00			
5.80		0.00	0.00			
6.80		0.03	1.44			
7.80	15.6	0.12	7.56			
8.80		0.16	16.68	9.63	8.00	
9.80		0.29	32.52			
10.80	18.9	0.38	54.24			
11.80		0.34	75.12			
12.80		0.27	92.16			
13.80	21.1	0.27	108.36			
14.80		0.22	122.16			
15.80		0.23	135.84			
16.80	21.7	0.11	143.88			
17.80		0.03	146.64			
18.80		0.00	147.00			
19.80	19.4	0.00	147.00			
20.80		0.00	147.00			
21.80		0.00	147.00			
22.80	20.0	0.00	147.00			
23.80		0.00	147.00			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 10- 9-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.025	0.000	0.056	0.056	2.72	1.18	1.53	3.64				
1.80	0.021	0.000	0.051	0.051	2.60	1.20	1.41	3.16				
2.80	0.016	0.000	0.046	0.046	2.53	1.20	1.32	2.94				
3.80	0.014	0.000	0.042	0.042	2.42	1.23	1.18	2.69				
4.80	0.011	0.000	0.040	0.040	2.32	1.24	1.07	2.59				
5.80	0.010	0.000	0.035	0.035	2.25	1.26	0.99	2.22				
6.80	0.007	0.000	0.032	0.032	2.19	1.30	0.89	2.02				0
7.80	0.006	0.000	0.030	0.030	2.13	1.31	0.82	1.78				
8.80	0.014	0.000	0.030	0.030	2.12	1.31	0.81	1.82				
9.80	0.032	0.000	0.030	0.030	2.15	1.24	0.91	1.90	0.043	0.013	0.039	
10.80	0.051	0.000	0.030	0.030	2.09	1.28	0.81	1.83				
11.80	0.067	0.000	0.030	0.030	2.08	1.30	0.78	1.83				
12.80	0.072	0.000	0.029	0.029								
13.80	0.077	0.000	0.030	0.030	2.07	1.33	0.74	1.75				
14.80	0.086	0.000	0.030	0.030	2.06	1.33	0.73	1.70				
15.80	0.094	0.000	0.030	0.030	1.97	1.06	0.91	1.65				
16.80	0.103	0.000	0.030	0.030	2.05	1.31	0.73	1.75				
17.80	0.103	0.000	0.030	0.030	2.24	1.34	0.90	1.66	0.031	0.009	0.030	
18.80	0.096	0.000	0.028	0.028	2.00	1.36	0.64	1.64				
19.80	0.092	0.000	0.026	0.026	2.00	1.36	0.64	1.61				
20.80	0.087	0.000	0.025	0.025	2.03	1.37	0.67	1.61				
21.80	0.081	0.000	0.024	0.024	2.04	1.37	0.67	1.58				
22.80	0.078	0.000	0.024	0.024	2.04	1.39	0.65	1.56				
23.80	0.075	0.000	0.022	0.022	2.03	1.37	0.65	1.58				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	19.4	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	18.9	0.00	0.00			
5.80		0.00	0.00			
6.80		0.05	2.40			
7.80	17.8	0.10	7.80			
8.80		0.22	19.56	9.63		8.00
9.80		0.33	38.04			
10.80	20.0	0.28	55.44			
11.80		0.27	71.76			
12.80		0.28	88.44			
13.80	20.0	0.31	106.68			
14.80		0.35	127.20			
15.80		0.29	145.32			
16.80	21.1	0.23	159.84			
17.80		0.06	165.48			
18.80		0.00	166.20			
19.80	16.7	0.00	166.20			
20.80		0.00	166.20			
21.80		0.00	166.20			
22.80	15.6	0.00	166.20			
23.80		0.00	166.20			

% POSSIBLE MINUTES OF SUNSHINE 26

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 10-10-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.073	0.000	0.022	0.022	2.00	1.31	0.69	1.56				
1.80	0.067	0.000	0.021	0.021	2.00	1.34	0.66	1.63				
2.80	0.062	0.000	0.021	0.021	2.00	1.37	0.63	1.61				
3.80	0.058	0.000	0.021	0.021	1.99	1.39	0.60	1.56				
4.80	0.052	0.000	0.021	0.021	2.01	1.38	0.63	1.64				
5.80	0.048	0.000	0.021	0.021	2.00	1.36	0.64	1.55				160
6.80	0.046	0.000	0.021	0.021	2.00	1.36	0.64	1.52				
7.80	0.041	0.000	0.021	0.021	2.03	1.39	0.64	1.52				
8.80	0.037	0.000	0.024	0.024	1.95	1.39	0.56	1.47				
9.80	0.041	0.000	0.026	0.026	1.93	1.37	0.57	1.50	0.049	0.017	0.043	
10.80	0.055	0.000	0.026	0.026	1.96	1.46	0.50	1.62				
11.80	0.072	0.000	0.027	0.027	1.95	1.44	0.51	1.62				
12.80	0.091	0.000	0.027	0.027	1.96	1.43	0.53	1.55				
13.80	0.116	0.000	0.028	0.028	2.00	1.42	0.58	1.82				
14.80	0.143	0.000	0.029	0.029	1.91	1.44	0.47	1.62	0.165	0.013	0.049	
15.80	0.165	0.000	0.029	0.029	1.91	1.42	0.49	1.69				
16.80												
17.80												
18.80												
19.80												
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	16.1	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	16.1	0.00	0.00			
5.80		0.00	0.00			
6.80		0.02	0.96			
7.80	16.1	0.09	5.52			
8.80		0.22	17.16			
9.80		0.35	36.60			
10.80	18.9	0.44	61.92			
11.80		0.60	96.00			
12.80		1.13	157.44			
13.80	21.1	0.99	218.52			
14.80		0.78	267.84			
15.80		0.46	299.28			
16.80	23.3	0.22	315.36			
17.80		0.06	320.88			
18.80		0.00	321.60			
19.80	17.8	0.00	321.60			
20.80		0.00	321.60			
21.80		0.00	321.60			
22.80	15.6	0.00	321.60			
23.80		0.00	321.60			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 10- 8-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.002	0.002								
1.97	0.000	0.000	0.002	0.002	1.31	1.25	0.06	0.00				
2.97	0.000	0.000	0.002	0.002								
3.97	0.000	0.000	0.025	0.025	1.55	1.54	0.01	12.09				
4.97	0.000	0.070	0.024	0.093	2.05	1.54	0.52	12.09				
5.97	0.000	0.068	0.024	0.092	2.06	1.52	0.54	12.09				
6.97	0.000	0.067	0.025	0.092	2.19	1.60	0.58	12.16				0
7.97	0.000	0.058	0.026	0.083	2.18	1.60	0.57	12.23				
8.97	0.000	0.041	0.031	0.072	2.15	1.59	0.56	11.97				
9.97	0.000	0.013	0.046	0.059	2.13	1.61	0.52	11.57				
10.97	0.012	0.000	0.068	0.068				11.20				
11.97	0.041	0.000	0.078	0.078	2.03	1.62	0.41	10.83				
12.97	0.064	0.000	0.076	0.076	2.01	1.60	0.42	10.54				
13.97	0.078	0.000	0.072	0.072	2.01	1.60	0.41	10.10				
14.97	0.090	0.000	0.065	0.065	1.98	1.57	0.41	9.80	0.074	0.041	0.026	0
15.97	0.098	0.000	0.061	0.061	1.93	1.56	0.36	9.58				
16.97	0.102	0.000	0.056	0.056	1.90	1.42	0.47	8.91				
17.97	0.096	0.000	0.050	0.050	1.87	1.48	0.39	8.23				
18.97	0.086	0.000	0.042	0.042	1.86	1.47	0.38	7.89				
19.97	0.075	0.000	0.033	0.033	1.81	1.35	0.47	7.62	0.048	0.031	0.036	
20.97	0.070	0.000	0.028	0.028	1.81	1.46	0.35	7.41				
21.97	0.062	0.000	0.024	0.024	1.82	1.47	0.36	7.20				0
22.97	0.057	0.000	0.021	0.021	1.76	1.45	0.31	6.86				
23.97	0.052	0.000	0.020	0.020	1.73	1.47	0.26	6.78				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	16.1	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	15.6	0.00	0.00			
5.97		0.00	0.00			
6.97		0.03	1.74			
7.97	15.6	0.12	8.76			
8.97		0.16	18.28	9.63	8.00	
9.97		0.29	35.42			
10.97	18.9	0.38	58.04			
11.97		0.38	78.52			
12.97		0.28	95.44			
13.97	21.1	0.27	111.66			
14.97		0.22	124.96			
15.97		0.23	138.74			
16.97	21.7	0.11	145.58			
17.97		0.03	147.54			
18.97		0.00	147.60			
19.97	19.4	0.00	147.60			
20.97		0.00	147.60			
21.97		0.00	147.60			
22.97	20.0	0.00	147.60			
23.97		0.00	147.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 10- 9-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.048	0.000	0.019	0.019	1.69	1.46	0.24	6.45				
1.97	0.045	0.000	0.018	0.018	1.67	1.45	0.22	6.31				
2.97	0.043	0.000	0.016	0.016	1.67	1.44	0.24	6.04				
3.97	0.039	0.000	0.016	0.016	1.64	1.42	0.22	5.89				
4.97	0.036	0.000	0.015	0.015	1.60	1.36	0.24	5.71				
5.97	0.032	0.000	0.014	0.014	1.61	1.36	0.25	5.53				
6.97	0.032	0.000	0.014	0.014	1.58	1.37	0.21	5.44				
7.97	0.028	0.000	0.014	0.014	1.56	1.39	0.18	5.30				0
8.97	0.028	0.000	0.014	0.014	1.59	1.37	0.22	5.27				
9.97	0.032	0.000	0.014	0.014	1.66	1.37	0.29	5.26	0.039	0.011	0.013	
10.97	0.040	0.000	0.014	0.014	1.61	1.32	0.29	5.22				
11.97	0.046	0.000	0.014	0.014	1.58	1.36	0.22	5.13				
12.97	0.049	0.000	0.015	0.015								
13.97	0.053	0.000	0.014	0.014	1.59	1.34	0.25	5.01				
14.97	0.059	0.000	0.015	0.015	1.61	1.39	0.22	4.96				
15.97	0.063	0.000	0.015	0.015	1.52	1.32	0.20	4.80				
16.97	0.068	0.000	0.015	0.015	1.61	1.34	0.27	4.86				
17.97	0.068	0.000	0.015	0.015	1.52	1.37	0.15	4.77	0.026	0.006	0.017	
18.97	0.063	0.000	0.014	0.014	1.59	1.36	0.23	4.72				
19.97	0.059	0.000	0.013	0.013	1.62	1.36	0.25	4.68				
20.97	0.056	0.000	0.013	0.013	1.60	1.39	0.21	4.62				
21.97	0.052	0.000	0.012	0.012	1.63	1.37	0.26	4.55				
22.97	0.050	0.000	0.012	0.012	1.63	1.36	0.27	4.57				
23.97	0.048	0.000	0.012	0.012	1.61	1.37	0.24	4.56				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	19.4	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	18.9	0.00	0.00			
5.97		0.00	0.00			
6.97		0.05	2.90			
7.97	17.8	0.10	8.80			
8.97		0.22	21.76	9.63		8.00
9.97		0.33	41.34			
10.97	20.0	0.28	58.24			
11.97		0.27	74.46			
12.97		0.28	91.24			
13.97	20.0	0.31	109.78			
14.97		0.35	130.70			
15.97		0.29	148.22			
16.97	21.1	0.23	162.14			
17.97		0.06	166.08			
18.97		0.00	166.20			
19.97	16.7	0.00	166.20			
20.97		0.00	166.20			
21.97		0.00	166.20			
22.97	15.6	0.00	166.20			
23.97		0.00	166.20			

% POSSIBLE MINUTES OF SUNSHINE 26

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 5 10-10-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (3)
0.97	0.045	0.000	0.011	0.011	1.59	1.37	0.22	4.48				
1.97	0.043	0.000	0.011	0.011	1.61	1.39	0.22	4.64				
2.97	0.041	0.000	0.011	0.011	1.59	1.39	0.20	4.58				
3.97	0.036	0.000	0.011	0.011	1.58	1.36	0.22	4.53				0
4.97	0.034	0.000	0.011	0.011	1.64	1.41	0.23	4.53				
5.97	0.032	0.000	0.011	0.011	1.62	1.38	0.24	4.45				
6.97	0.029	0.000	0.011	0.011	1.58	1.34	0.24	4.39				
7.97	0.027	0.000	0.011	0.011	1.62	1.35	0.26	4.38				
8.97	0.024	0.000	0.012	0.012	1.56	1.36	0.20	4.35				
9.97	0.028	0.000	0.013	0.013	1.56	1.36	0.20	4.36	0.025	0.008	0.030	
10.97	0.033	0.000	0.013	0.013	1.65	1.45	0.19	4.58				
11.97	0.045	0.000	0.013	0.013	1.61	1.43	0.18	4.58				
12.97	0.059	0.000	0.013	0.013	1.61	1.38	0.23	4.38				
13.97	0.075	0.000	0.014	0.014	1.69	1.44	0.26	4.44				
14.97	0.092	0.000	0.014	0.014	1.61	1.40	0.21	4.38	0.107	0.012	0.048	
15.97	0.104	0.000	0.014	0.014	1.62	1.42	0.20	4.38				
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												
23.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	16.1	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	16.1	0.00	0.00			
5.97		0.00	0.00			
6.97		0.02	1.16			
7.97	16.1	0.09	6.42			
8.97		0.22	19.36			
9.97		0.35	40.10			
10.97	18.9	0.44	66.32			
11.97		0.60	102.00			
12.97		1.13	168.74			
13.97	21.1	0.99	228.42			
14.97		0.78	275.64			
15.97		0.46	303.88			
16.97	23.3	0.23	318.14			
17.97		0.06	322.08			
18.97		0.00	322.20			
19.97	17.8	0.00	322.20			
20.97		0.00	322.20			
21.97		0.00	322.20			
22.97	15.6	0.00	322.20			
23.97		0.00	322.20			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 10-14-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.000	0.000	0.000	2.08	1.53	0.54	0.17				
2.13	0.000	0.000	0.000	0.000	2.09	1.56	0.53	0.17				
3.13	0.000	0.680	0.259	0.939	5.02	1.51	3.51	9.67				
4.13	0.000	0.904	0.229	1.133	9.91	1.52	8.40	9.09				
5.13	0.000	0.886	0.241	1.128	11.23	1.51	9.72	8.46				
6.13	0.000	0.874	0.255	1.128	11.17	1.52	9.65	9.25				0
7.13	0.000	0.851	0.262	1.113	11.04	1.48	9.56	8.60				
8.13	0.000	0.820	0.288	1.108	10.99	1.51	9.48	8.41				
9.13	0.000	0.677	0.406	1.083	10.57	1.40	9.17	9.27				
10.13	0.002	0.278	0.725	1.005	10.26	1.51	8.76	9.29	*	0.714	0.167	
11.13	0.099	0.037	0.770	0.807	9.45	1.47	7.98	8.36				
12.13	0.368	0.015	0.588	0.603	8.34	1.48	6.86	7.25				
13.13	0.701	0.011	0.403	0.414	7.37	1.49	5.87	6.47				
14.13	0.913	0.011	0.268	0.279	6.58	1.48	5.10	5.82				
15.13	0.915	0.010	0.207	0.217	6.05	1.53	4.52	5.24				0
16.13	0.826	0.010	0.165	0.174	5.62	1.55	4.07	4.57				
17.13	0.707	0.010	0.136	0.145	5.22	1.56	3.66	4.01				
18.13	0.586	0.009	0.107	0.116	4.88	1.53	3.34	3.42	*	*	0.047	
19.13	0.480	0.005	0.086	0.091	4.56	1.56	3.00	2.86				
20.13	0.398	0.003	0.070	0.073	4.32	1.56	2.76	2.39				
21.13	0.336	0.001	0.059	0.060	4.09	1.56	2.53	2.01				
22.13	0.281	0.001	0.053	0.055	3.92	1.54	2.38	1.72				
23.13	0.240	0.000	0.045	0.045	3.72	1.56	2.17	1.40				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	12.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	12.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	11.7	0.21	3.48			
8.13		0.49	18.52			
9.13		0.73	49.64			
10.13	20.6	0.90	94.80	39.93	10.00	
11.13		1.06	150.08			
12.13		1.06	213.68			
13.13	28.3	0.91	276.08			
14.13		0.73	329.24			
15.13		0.48	371.04			
16.13	28.9	0.21	397.68			
17.13		0.05	409.00			
18.13		0.00	411.60			
19.13	23.3	0.00	411.60			
20.13		0.00	411.60			
21.13		0.00	411.60			
22.13	18.3	0.00	411.60			
23.13		0.00	411.60			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 86.0 CENT.

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

JSEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 10-15-75

MIX, HC+NOX SLUG* 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.204	0.000	0.039	0.039	3.65	1.56	2.10	1.36				
1.13	0.173	0.000	0.032	0.032	3.53	1.52	2.02	1.15				
2.13	0.148	0.000	0.029	0.029	3.56	1.52	2.05	1.09				
3.13	0.126	0.000	0.025	0.025	3.45	1.53	1.91	0.87				
4.13	0.107	0.000	0.021	0.021	3.27	1.48	1.79	0.72				
5.13	0.091	0.000	0.021	0.021	3.31	1.55	1.76	0.97				0
6.13	0.078	0.000	0.018	0.018	3.17	1.55	1.63	0.81				
7.13	0.064	0.000	0.017	0.017	3.07	1.49	1.58	0.62				
8.13	0.055	0.000	0.016	0.016	3.07	1.53	1.54	0.62				
9.13	0.047	0.011	0.072	0.082	3.25	1.56	1.69	0.48				
10.13	0.027	0.134	0.160	0.294	3.27	1.56	1.71	0.50	0.035	0.166	0.092	
11.13	0.024	0.072	0.201	0.273	3.11	1.56	1.56	0.63				
12.13	0.078	0.037	0.213	0.250	2.90	1.54	1.37	0.81				
13.13	0.163	0.021	0.203	0.225	2.85	1.53	1.32	0.92				
14.13	0.243	0.016	0.180	0.196	2.83	1.58	1.25	1.07				130
15.13	0.304	0.015	0.158	0.173	2.67	1.46	1.21	0.77				
16.13	0.333	0.014	0.136	0.150	2.77	1.56	1.22	1.05	0.245 **	0.114	0.055	
17.13	0.334	0.014	0.116	0.129	2.73	1.53	1.20	1.07				
18.13	0.305	0.011	0.083	0.094	2.80	1.61	1.19	1.09				
19.13	0.270	0.004	0.059	0.063	2.78	1.60	1.18	1.05				
20.13	0.249	0.003	0.043	0.046	2.65	1.41	1.24	1.85				
21.13	0.237	0.000	0.037	0.037	2.81	1.56	1.25	1.06				
22.13	0.228	0.000	0.034	0.034	2.80	1.61	1.19	1.07				
23.13	0.219	0.002	0.033	0.035	2.80	1.56	1.24	1.00				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	16.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	14.4	0.20	3.40			
8.13		0.47	17.56			
9.13		0.71	47.68	39.93		9.00
10.13	23.9	0.89	91.72			
11.13		0.98	145.84			
12.13		0.96	204.48			
13.13	27.8	0.88	261.44			
14.13		0.69	312.72			
15.13		0.49	352.52			
16.13	27.8	0.20	379.60			
17.13		0.04	390.52			
18.13		0.00	392.40			
19.13	21.1	0.00	392.40			
20.13		0.00	392.40			
21.13		0.00	392.40			
22.13	18.9	0.00	392.40			
23.13		0.00	392.40			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 84.0 CENT

*A second injection took place at approximately 0900 EST on 15 Oct 75. Target injections were 0.50 ppm HC and 0.25 ppm NO_x.

**Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 10-16-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.211	0.003	0.032	0.035	2.80	1.56	1.24	0.99				
1.13	0.200	0.003	0.031	0.034	2.80	1.54	1.26	0.98				
2.13	0.190	0.003	0.031	0.034	2.80	1.56	1.24	0.96				
3.13	0.182	0.004	0.029	0.033	2.78	1.53	1.25	0.98				
4.13	0.173	0.005	0.028	0.033	2.79	1.54	1.25	0.95				0
5.13	0.165	0.004	0.028	0.032	2.77	1.55	1.22	0.93				
6.13	0.156	0.005	0.027	0.032	2.78	1.49	1.29	0.91				
7.13	0.148	0.004	0.027	0.031	2.78	1.48	1.30	0.90				
8.13	0.139	0.003	0.027	0.030	2.76	1.48	1.28	0.89				
9.13	0.133	0.005	0.029	0.034	2.70	1.48	1.22	0.79				
10.13	0.130	0.007	0.032	0.040	2.60	1.47	1.14	0.73	0.131	0.011	0.037	
11.13	0.140	0.010	0.034	0.044	2.51	1.46	1.05	0.61				
12.13	0.176	0.003	0.036	0.040	2.53	1.38	1.15	0.69				
13.13	0.229	0.004	0.040	0.044	2.60	1.41	1.19	0.84				
14.13	0.273	0.004	0.043	0.047	2.61	1.51	1.10	0.97				
15.13	0.291	0.003	0.043	0.046	2.57	1.50	1.07	0.97	0.248	0.014	0.056	
16.13	0.293	0.002	0.043	0.045	2.53	1.43	1.10	0.96				
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	17.2	0.00	0.00			
5.13		0.00	0.00			
6.13		0.04	0.32			
7.13	16.7	0.20	4.00			
8.13		0.45	18.00			
9.13		0.56	45.88			
10.13	21.7	0.86	81.88			
11.13		0.99	134.52			
12.13		0.96	193.68			
13.13	27.8	0.73	249.44			
14.13		0.56	291.88			
15.13		0.39	320.12			
16.13	26.7	0.09	345.12			
17.13		0.02	349.96			
18.13		0.00	351.00			
19.13	21.1	0.00	351.00			
20.13		0.00	351.00			
21.13		0.00	351.00			
22.13	21.1	0.00	351.00			
23.13		0.00	351.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 83.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 10-14-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000								
1.30	0.000	0.000	0.000	0.000	2.03	1.51	0.52	0.20				
2.30	0.000	0.000	0.000	0.000	2.00	1.51	0.49	0.14				
3.30	0.000	0.215	0.049	0.264								
4.30	0.000	0.216	0.049	0.265	4.66	1.52	3.15	9.23				
5.30	0.000	0.214	0.050	0.264	5.24	1.52	3.72	8.83				0
6.30	0.000	0.214	0.051	0.265	5.23	1.52	3.71	9.54				
7.30	0.000	0.211	0.051	0.262	5.19	1.52	3.67	8.87				
8.30	0.000	0.203	0.058	0.261	5.04	1.44	3.60	8.71				
9.30	0.003	0.129	0.127	0.257	5.28	1.48	3.79	9.62				
10.30	0.111	0.015	0.191	0.206	4.76	1.52	3.24	8.54	0.134	0.162	0.102	
11.30	0.209	0.005	0.149	0.154	4.89	1.41	3.48	7.28				
12.30	0.358	0.004	0.112	0.117	3.94	1.42	2.52	6.21				
13.30	0.455	0.004	0.086	0.090	3.63	1.48	2.14	5.50				
14.30	0.471	0.004	0.060	0.064	3.30	1.49	1.81	4.71				
15.30	0.448	0.004	0.049	0.053	3.09	1.49	1.59	4.09				450
16.30	0.393	0.004	0.041	0.045	2.86	1.47	1.39	3.50				
17.30	0.347	0.005	0.033	0.039	2.71	1.50	1.21	3.00				
18.30	0.284	0.004	0.027	0.031	2.56	1.48	1.08	2.47				
19.30	0.236	0.000	0.019	0.019	2.44	1.46	0.98	2.04				
20.30	0.195	0.000	0.021	0.021	2.35	1.46	0.89	1.71				
21.30	0.163	0.000	0.018	0.018	2.29	1.48	0.81	1.41				
22.30	0.136	0.000	0.016	0.016	2.25	1.48	0.76	1.14				
23.30	0.113	0.000	0.014	0.014	2.23	1.47	0.76	0.97				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	12.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	12.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.03	0.54			
7.30	11.7	0.21	5.58			
8.30		0.49	23.22			
9.30		0.73	56.94	65.70	9.33	
10.30	20.6	0.90	105.80			
11.30		1.06	160.68			
12.30		1.06	224.28			
13.30	28.3	0.91	285.18			
14.30		0.73	336.54			
15.30		0.48	375.84			
16.30	28.9	0.21	399.78			
17.30		0.05	409.50			
18.30		0.00	411.60			
19.30	25.3	0.00	411.60			
20.30		0.00	411.60			
21.30		0.00	411.60			
22.30	18.3	0.00	411.60			
23.30		0.00	411.60			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 5 10-15-75

MIX, HC+NOX SLUG* 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.094	0.000	0.012	0.012	2.22	1.47	0.76	0.95				
1.30	0.079	0.000	0.011	0.011	2.20	1.49	0.71	0.79				
2.30	0.065	0.000	0.009	0.009	2.28	1.46	0.82	0.67				
3.30	0.055	0.000	0.007	0.007	2.25	1.49	0.76	0.58				
4.30	0.046	0.000	0.007	0.007	2.01	1.35	0.66	0.44				
5.30	0.039	0.000	0.009	0.009	2.20	1.47	0.73	0.67				110
6.30	0.032	0.000	0.007	0.007	2.20	1.45	0.74	0.48				
7.30	0.026	0.000	0.007	0.007								
8.30	0.021	0.000	0.006	0.006	2.15	1.45	0.70	0.41				
9.30	0.021	0.016	0.059	0.075								
10.30	0.005	0.186	0.102	0.288					0.018	0.111	0.033	
11.30	0.011	0.152	0.123	0.275								
12.30	0.015	0.122	0.144	0.266								
13.30	0.020	0.096	0.155	0.251	2.01	1.43	0.58	0.59				
14.30	0.025	0.077	0.166	0.243	2.08	1.46	0.62	0.77				140
15.30	0.024	0.064	0.169	0.233	1.86	1.36	0.50	0.50				
16.30	0.024	0.056	0.169	0.225	2.06	1.49	0.56	0.82	**	**	0.027	
17.30	0.018	0.043	0.171	0.214	2.04	1.48	0.56	0.84				
18.30	0.000	0.032	0.181	0.213	2.07	1.54	0.53	0.84				
19.30	0.000	0.021	0.188	0.210	2.08	1.52	0.56	0.82				
20.30	0.000	0.021	0.186	0.207	1.90	1.39	0.51	0.51				
21.30	0.000	0.020	0.185	0.205	2.11	1.49	0.62	0.81				
22.30	0.000	0.020	0.182	0.202	2.11	1.50	0.61	0.80				
23.30	0.000	0.020	0.180	0.200	2.11	1.50	0.61	0.75				

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	16.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.03	0.54			
7.30	14.4	0.20	5.40			
8.30		0.47	22.26			
9.30		0.71	54.78	65.70		9.00
10.30	23.9	0.89	100.62			
11.30		0.98	155.64			
12.30		0.96	214.08			
13.30	27.8	0.88	270.24			
14.30		0.69	319.62			
15.30		0.49	357.42			
16.30	27.8	0.20	381.60			
17.30		0.04	390.72			
18.30		0.00	392.40			
19.30	21.1	0.00	392.40			
20.30		0.00	392.40			
21.30		0.00	392.40			
22.30	18.9	0.00	392.40			
23.30		0.00	392.40			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

*A second injection took place at approximately 0900 EST on 15 Oct 75. Target injections were 0.50 ppm HC and 0.25 ppm NO_x.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 10-16-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.021	0.178	0.199	2.12	1.47	0.65	0.73				
1.30	0.000	0.021	0.174	0.196	2.11	1.49	0.62	0.74				
2.30	0.000	0.019	0.171	0.190	2.10	1.46	0.64	0.71				
3.30	0.000	0.020	0.169	0.189	2.11	1.44	0.67	0.70				
4.30	0.000	0.020	0.168	0.188	2.11	1.45	0.66	0.66				
5.30	0.000	0.019	0.166	0.185	2.10	1.47	0.63	0.69				0
6.30	0.000	0.020	0.160	0.181	2.11	1.41	0.70	0.64				
7.30	0.000	0.019	0.160	0.180	2.11	1.40	0.71	0.60				
8.30	0.012	0.032	0.143	0.175	2.10	1.40	0.70	0.59				
9.30	0.021	0.037	0.130	0.168								
10.30	0.027	0.033	0.123	0.156					0.061*	0.106	0.025	
11.30	0.043	0.032	0.121	0.153	1.90	1.31	0.59	0.37				
12.30	0.067	0.027	0.113	0.140	1.90	1.29	0.61	0.42				
13.30	0.090	0.019	0.109	0.128	2.04	1.44	0.60	0.74				
14.30	0.107	0.015	0.105	0.120	2.01	1.46	0.55	0.68				
15.30	0.114	0.012	0.101	0.112	2.00	1.43	0.57	0.69	0.131	0.086	0.023	
16.30	0.120	0.010	0.095	0.105								
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	17.2	0.00	0.00			
5.30		0.00	0.00			
6.30		0.04	0.12			
7.30	16.7	0.20	6.00			
8.30		0.45	22.50			
9.30		0.56	51.48			
10.30	21.7	0.86	90.48			
11.30		0.99	144.42			
12.30		0.96	203.28			
13.30	27.8	0.73	256.74			
14.30		0.56	297.48			
15.30		0.39	328.02			
16.30	26.7	0.09	346.02			
17.30		0.02	350.16			
18.30		0.00	351.00			
19.30	21.1	0.00	351.00			
20.30		0.00	351.00			
21.30		0.00	351.00			
22.30	21.1	0.00	351.00			
23.30		0.00	351.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 10-14-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.000	0.000	0.000	2.12	1.56	0.56	0.22				
2.47	0.000	0.000	0.000	0.000	2.10	1.58	0.52	0.17				
3.47	0.000	0.674	0.144	0.818								
4.47	0.000	0.671	0.149	0.819	6.29	1.47	4.82	8.95				
5.47	0.000	0.648	0.154	0.802	6.96	1.53	5.43	8.69				0
6.47	0.000	0.636	0.156	0.792	7.23	1.58	5.65	9.24				
7.47	0.000	0.626	0.164	0.789	7.13	1.53	5.60	8.73				
8.47	0.000	0.594	0.182	0.775	6.84	1.40	5.44	8.59				
9.47	0.000	0.481	0.278	0.759	6.49	1.51	4.98	9.48				
10.47	0.004	0.214	0.456	0.670	6.54	1.51	5.03	8.82	*	0.372	0.073	
11.47	0.079	0.035	0.494	0.529	5.97	1.36	4.61	7.24				
12.47	0.248	0.011	0.389	0.400	4.96	1.38	3.59	6.17				
13.47	0.426	0.009	0.284	0.293	4.56	1.53	3.02	5.36				
14.47	0.556	0.006	0.197	0.203	3.93	1.45	2.48	4.48				
15.47	0.604	0.006	0.139	0.145	3.51	1.48	2.02	3.81				910
16.47	0.565	0.006	0.107	0.113	3.16	1.43	1.73	3.19				
17.47	0.478	0.006	0.080	0.087	2.87	1.44	1.44	2.68				
18.47	0.388	0.006	0.057	0.063	2.66	1.43	1.23	2.17	*	*	0.031	
19.47	0.317	0.005	0.043	0.048	2.53	1.41	1.12	1.79				
20.47	0.261	0.003	0.035	0.039	2.36	1.37	0.99	1.48				
21.47	0.219	0.001	0.029	0.030	2.31	1.40	0.92	1.22				
22.47	0.184	0.000	0.026	0.026	2.23	1.35	0.87	0.98				0
23.47	0.155	0.000	0.021	0.021	2.14	1.36	0.78	0.86				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	12.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	11.7	0.21	7.68			
8.47		0.49	28.12			
9.47		0.73	64.24	58.05	9.50	
10.47	20.6	0.90	112.80			
11.47		1.06	171.28			
12.47		1.06	234.88			
13.47	28.3	0.91	294.28			
14.47		0.73	343.84			
15.47		0.48	380.64			
16.47	28.9	0.21	401.88			
17.47		0.05	410.00			
18.47		0.00	411.60			
19.47	25.3	0.00	411.60			
20.47		0.00	411.60			
21.47		0.00	411.60			
22.47	18.3	0.00	411.60			
23.47		0.00	411.60			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 10-15-75

MIX, HC+NOX SLUG * 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.128	0.000	0.018	0.018	2.16	1.31	0.84	0.88				
1.47	0.109	0.000	0.015	0.015	2.10	1.35	0.75	0.65				
2.47	0.091	0.000	0.014	0.014	2.12	1.31	0.81	0.62				
3.47	0.077	0.000	0.012	0.012	2.07	1.29	0.78	0.48				
4.47	0.064	0.000	0.011	0.011	1.84	1.20	0.64	0.41				
5.47	0.055	0.000	0.011	0.011	2.02	1.26	0.77	0.61				160
6.47	0.046	0.000	0.011	0.011	1.98	1.26	0.72	0.50				
7.47	0.037	0.000	0.010	0.010	1.75	1.16	0.59	0.27				
8.47	0.031	0.000	0.009	0.009	1.90	1.23	0.67	0.41				
9.47	0.000	0.195	0.107	0.302								
10.47	0.003	0.155	0.136	0.291					0.025	**	0.050	
11.47	0.013	0.096	0.152	0.248								
12.47	0.035	0.057	0.193	0.249								
13.47	0.068	0.032	0.193	0.225	1.89	1.17	0.72	0.45				
14.47	0.102	0.021	0.193	0.214	2.06	1.31	0.75	0.83				160
15.47	0.124	0.014	0.171	0.185	1.90	1.21	0.69	0.68	0.119	0.116	0.044	
16.47	0.139	0.011	0.155	0.166	2.00	1.31	0.69	0.85				
17.47	0.137	0.006	0.128	0.135	1.99	1.27	0.72	0.85				
18.47	0.120	0.004	0.092	0.096	2.01	1.36	0.65	0.83				
19.47	0.092	0.001	0.068	0.070	2.02	1.34	0.68	0.81				
20.47	0.075	0.001	0.057	0.058	1.94	1.27	0.67	0.76				
21.47	0.065	0.000	0.047	0.047	2.04	1.34	0.70	0.83				
22.47	0.059	0.002	0.041	0.043	2.05	1.32	0.73	0.77				
23.47	0.049	0.002	0.035	0.037	2.06	1.33	0.73	0.75				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	16.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	14.4	0.20	7.40			
8.47		0.47	26.96			
9.47		0.71	61.88	58.05		9.00
10.47	23.9	0.89	109.52			
11.47		0.98	165.44			
12.47		0.96	223.68			
13.47	27.8	0.88	279.04			
14.47		0.69	326.52			
15.47		0.49	362.52			
16.47	27.8	0.20	383.60			
17.47		0.04	391.12			
18.47		0.00	392.40			
19.47	21.1	0.00	392.40			
20.47		0.00	392.40			
21.47		0.00	392.40			
22.47	18.9	0.00	392.40			
23.47		0.00	392.40			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

*A second injection took place at approximately 0900 EST on 15 Oct 75 Target injections were 0.50 ppm HC and 0.25 ppm NO_x.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 10-16-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.045	0.002	0.032	0.034	2.06	1.29	0.77	0.71				
1.47	0.041	0.001	0.030	0.031	2.04	1.32	0.72	0.73				
2.47	0.036	0.002	0.027	0.029	2.04	1.30	0.74	0.68				
3.47	0.032	0.002	0.027	0.029	2.04	1.30	0.74	0.71				
4.47	0.030	0.002	0.026	0.028	2.02	1.30	0.72	0.71				210
5.47	0.027	0.002	0.025	0.027	2.01	1.32	0.69	0.68				
6.47	0.024	0.002	0.022	0.025	2.01	1.30	0.72	0.65				
7.47	0.021	0.002	0.021	0.024	2.02	1.27	0.75	0.59				
8.47	0.024	0.003	0.021	0.025	2.00	1.30	0.70	0.62				
9.47	0.037	0.005	0.024	0.029								
10.47	0.061	0.006	0.025	0.031					0.060	0.013	0.031	
11.47	0.096	0.010	0.027	0.036	1.80	1.23	0.57	0.40				
12.47	0.144	0.011	0.027	0.037	1.80	1.18	0.62	0.43				
13.47	0.187	0.011	0.028	0.039	1.97	1.30	0.67	0.73				
14.47	0.219	0.009	0.028	0.036	1.91	1.26	0.65	0.69				
15.47	0.226	0.009	0.027	0.035	1.90	1.26	0.64	0.72	0.201	0.015	0.041	
16.47	0.225	0.005	0.027	0.032								
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	17.2	0.00	0.00			
5.47		0.00	0.00			
6.47		0.04	1.12			
7.47	16.7	0.20	8.00			
8.47		0.45	27.00			
9.47		0.56	57.08			
10.47	21.7	0.86	99.08			
11.47		0.99	154.32			
12.47		0.96	212.88			
13.47	27.8	0.73	264.04			
14.47		0.56	305.08			
15.47		0.39	331.92			
16.47	26.7	0.09	346.92			
17.47		0.02	350.36			
18.47		0.00	351.00			
19.47	21.1	0.00	351.00			
20.47		0.00	351.00			
21.47		0.00	351.00			
22.47	21.1	0.00	351.00			
23.47		0.00	351.00			

% POSSIBLE MINUTES OF SUNSHINE 75

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 10-14-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000	2.04	1.52	0.52	0.16				
2.63	0.000	0.000	0.000	0.000	2.11	1.55	0.56	0.18				
3.63	0.000	0.096	0.021	0.118								
4.63	0.000	0.097	0.021	0.119	2.03	1.44	0.60	8.95				
5.63	0.000	0.097	0.021	0.119	2.29	1.56	0.73	8.63				
6.63	0.000	0.096	0.021	0.118	2.24	1.52	0.72	9.41				0
7.63	0.000	0.096	0.021	0.118	2.21	1.52	0.68	8.63				
8.63	0.000	0.096	0.021	0.118	2.02	1.47	0.55	8.92				
9.63	0.001	0.086	0.032	0.118	2.45	1.49	0.95	9.42				
10.63	0.007	0.053	0.045	0.098	2.35	1.52	0.83	7.95	0.017	0.047	0.018	
11.63	0.024	0.029	0.057	0.086	2.51	1.59	0.93	6.54				
12.63	0.066	0.021	0.055	0.076	2.18	1.40	0.78	5.55				
13.63	0.123	0.018	0.045	0.063	2.15	1.50	0.65	4.68				
14.63	0.171	0.018	0.033	0.051	2.08	1.49	0.59	4.02				
15.63	0.185	0.018	0.027	0.045	2.02	1.49	0.53	3.34				
16.63	0.183	0.016	0.021	0.037	1.98	1.51	0.48	2.76				210
17.63	0.145	0.015	0.017	0.032	1.91	1.55	0.36	2.29				
18.63	0.116	0.009	0.015	0.024	1.97	1.55	0.43	1.89	*	0.027	0.006	
19.63	0.093	0.004	0.011	0.015	1.98	1.55	0.44	1.53				
20.63	0.076	0.001	0.010	0.011	1.97	1.56	0.42	1.23				
21.63	0.063	0.000	0.009	0.009	1.99	1.56	0.43	1.01				
22.63	0.051	0.000	0.007	0.007	1.98	1.55	0.43	0.78				
23.63	0.043	0.000	0.006	0.006	1.98	1.52	0.46	0.65				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	12.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	11.7	0.21	9.78			
8.63		0.49	33.02			
9.63		0.73	71.54	62.58	9.67	
10.63	20.6	0.90	121.80			
11.63		1.06	181.88			
12.63		1.06	245.48			
13.63	28.3	0.91	303.38			
14.63		0.73	351.14			
15.63		0.48	385.44			
16.63	28.9	0.21	403.98			
17.63		0.05	410.50			
18.63		0.00	411.60			
19.63	23.3	0.00	411.60			
20.63		0.00	411.60			
21.63		0.00	411.60			
22.63	18.3	0.00	411.60			
23.63		0.00	411.60			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 86.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 10-15-75

MIX, HC+NOX SLUG* 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	VHHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.035	0.000	0.005	0.005	2.06	1.56	0.50	0.62				
1.63	0.029	0.000	0.005	0.005	2.05	1.55	0.50	0.49				
2.63	0.025	0.000	0.004	0.004	2.10	1.56	0.54	0.47				
3.63	0.021	0.000	0.004	0.004	2.10	1.54	0.56	0.31				
4.63	0.017	0.000	0.003	0.003	2.08	1.51	0.57	0.28				
5.63	0.014	0.000	0.005	0.005	2.15	1.51	0.65	0.31				0
6.63	0.011	0.000	0.005	0.005	2.16	1.56	0.61	0.28				
7.63	0.009	0.000	0.005	0.005	2.14	1.51	0.63	0.20				
8.63	0.006	0.243	0.072	0.314	2.09	1.52	0.57	0.11				
9.63	0.000	0.232	0.079	0.311								
10.63	0.001	0.207	0.096	0.304								
11.63	0.001	0.190	0.107	0.297					0.014**	0.087	0.020	
12.63	0.002	0.174	0.117	0.291								
13.63	0.004	0.145	0.132	0.277	1.98	1.48	0.50	0.43				
14.63	0.006	0.122	0.141	0.263	2.08	1.54	0.54	0.69	0.035**	0.140	0.024	
15.63	0.009	0.106	0.150	0.256	2.09	1.52	0.57	0.76				
16.63	0.009	0.094	0.150	0.244	2.09	1.53	0.55	0.72				
17.63	0.005	0.083	0.154	0.237	2.08	1.57	0.51	0.76				
18.63	0.001	0.082	0.157	0.240	2.12	1.59	0.53	0.75				
19.63	0.000	0.067	0.158	0.226	2.16	1.56	0.60	0.67				
20.63	0.000	0.065	0.155	0.220	2.18	1.56	0.62	0.75				
21.63	0.000	0.065	0.155	0.220	2.17	1.56	0.61	0.71				
22.63	0.000	0.065	0.151	0.216	2.17	1.56	0.61	0.65				
23.63	0.000	0.064	0.149	0.213	2.16	1.55	0.61	0.59				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	16.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	14.4	0.20	9.40			
8.63		0.47	31.66			
9.63		0.71	68.98	62.58		9.00
10.63	23.9	0.89	118.42			
11.63		0.98	175.24			
12.63		0.96	233.28			
13.63	27.8	0.88	287.84			
14.63		0.69	333.42			
15.63		0.49	367.22			
16.63	27.8	0.20	385.60			
17.63		0.04	391.52			
18.63		0.00	392.40			
19.63	21.1	0.00	392.40			
20.63		0.00	392.40			
21.63		0.00	392.40			
22.63	18.9	0.00	392.40			
23.63		0.00	392.40			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 84.0 CENT

*A second injection took place at approximately 0900 EST on 15 Oct 75. Target injections were 0.50 ppm HC and 0.25 ppm NO_x.

**Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 5 10-16-75

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.064	0.145	0.210	2.18	1.53	0.65	0.61				
1.63	0.000	0.063	0.142	0.205	2.17	1.54	0.63	0.60				
2.63	0.000	0.062	0.140	0.202	2.18	1.54	0.64	0.58				
3.63	0.000	0.062	0.138	0.200	2.15	1.49	0.66	0.52				
4.63	0.000	0.060	0.136	0.196	2.14	1.50	0.64	0.58				
5.63	0.000	0.059	0.134	0.193	2.14	1.49	0.65	0.55				0
6.63	0.000	0.058	0.128	0.186	2.13	1.49	0.64	0.51				
7.63	0.000	0.058	0.127	0.185	2.12	1.46	0.66	0.47				
8.63	0.004	0.062	0.121	0.183	2.12	1.48	0.64	0.50				
9.63	0.011	0.064	0.114	0.179								
10.63	0.012	0.058	0.117	0.174					0.027*	0.119	0.013	
11.63	0.022	0.055	0.113	0.168	1.93	1.40	0.53	0.31				
12.63	0.037	0.044	0.114	0.158	1.91	1.34	0.57	0.29				
13.63	0.055	0.034	0.112	0.147	2.05	1.49	0.56	0.58				
14.63	0.070	0.027	0.108	0.135	2.01	1.52	0.49	0.55	0.091	0.103	0.042	
15.63	0.078	0.024	0.105	0.128	2.00	1.50	0.50	0.61				
16.63	0.080	0.018	0.099	0.118								
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	17.2	0.00	0.00			
5.63		0.00	0.00			
6.63		0.04	1.52			
7.63	16.7	0.20	10.00			
8.63		0.45	31.50			
9.63		0.56	62.68			
10.63	21.7	0.86	107.68			
11.63		0.99	164.22			
12.63		0.96	222.48			
13.63	27.8	0.73	271.34			
14.63		0.56	308.68			
15.63		0.39	335.82			
16.63	26.7	0.09	347.82			
17.63		0.02	350.56			
18.63		0.00	351.00			
19.63	21.1	0.00	351.00			
20.63		0.00	351.00			
21.63		0.00	351.00			
22.63	21.1	0.00	351.00			
23.63		0.00	351.00			

% POSSIBLE MINUTES OF SUNSHINE 75

ADJ AIRPORT MAXIMUM TEMPERATURE 83.0 CENT

*Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 4 10-28-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.33	0.000	0.000	0.000	0.000	1.66	1.43	0.24	0.55				
1.33	0.000	0.000	0.000	0.000	1.66	1.46	0.21	0.55				
2.33	0.000	0.000	0.000	0.000	1.62	1.39	0.23	9.09				
3.33	0.000	0.770	0.186	0.956	9.14	1.37	7.77	8.85				
4.33	0.000	0.758	0.197	0.955	9.44	1.23	8.21	8.43				
5.33	0.000	0.741	0.203	0.944	10.25	1.35	8.90	8.85				0
6.33	0.000	0.732	0.214	0.945	9.16	1.36	7.80	8.93				
7.33	0.000	0.699	0.240	0.939	9.53	1.37	8.16	9.01				
8.33	0.000	0.535	0.371	0.906	9.90	1.38	8.52	9.09				
9.33	0.000	0.214	0.561	0.775	9.00	1.36	7.64	8.19				
10.33	0.090	0.032	0.596	0.628	8.05	1.36	6.68	7.29	0.160	0.582	0.154	
11.33	0.265	0.009	0.465	0.474	7.15	1.31	5.82	6.31				
12.33	0.465	0.004	0.328	0.333	6.40	1.32	5.08	5.72				
13.33	0.506	0.004	0.209	0.213	5.85	1.31	4.54	5.08				
14.33	0.526	0.002	0.147	0.149	5.22	1.18	4.04	4.12				
15.33	0.480	0.002	0.120	0.122	4.95	1.30	3.65	4.13				
16.33	0.401	0.002	0.094	0.096	4.63	1.29	3.34	3.67	0.406	0.018	0.128	
17.33	0.326	0.000	0.075	0.075	4.33	1.34	2.99	3.54				0
18.33	0.270	0.000	0.061	0.061	4.07	1.40	2.67	3.03				
19.33	0.227	0.000	0.053	0.053	3.86	1.35	2.51	2.68				
20.33	0.190	0.000	0.044	0.044	3.48	1.28	2.20	2.16				
21.33	0.163	0.000	0.039	0.039	3.35	1.39	1.97	2.25				
22.33	0.139	0.000	0.033	0.033	3.22	1.39	1.83	2.04				0
23.33	0.118	0.000	0.030	0.030	3.04	1.38	1.66	1.87				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.33		0.00	0.00			
1.33	13.9	0.00	0.00			
2.33		0.00	0.00			
3.33		0.00	0.00			
4.33	14.4	0.00	0.00			
5.33		0.00	0.00			
6.33		0.01	0.20			
7.33	15.0	0.09	2.40			
8.33		0.35	15.00			
9.33		0.50	37.00	39.93	9.00	
10.33	18.9	0.63	69.60			
11.33		0.69	108.60			
12.33		0.85	153.20			
13.33	21.1	0.34	194.00			
14.33		0.58	219.20			
15.33		0.47	251.80			
16.33	21.7	0.12	275.00			
17.33		0.01	278.00			
18.33		0.00	278.40			
19.33	16.7	0.00	278.40			
20.33		0.00	278.40			
21.33		0.00	278.40			
22.33	14.4	0.00	278.40			
23.33		0.00	278.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] Prior to 1100 EST, 28 Oct 75, partially due to range changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 4 10-29-75

MIX, NOX SLUG * 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.33	0.099	0.000	0.026	0.026	2.91	1.38	1.53	1.68				
1.33	0.086	0.000	0.021	0.021	2.73	1.34	1.40	1.43				
2.33	0.073	0.000	0.019	0.019	2.59	1.31	1.28	1.28				
3.33	0.060	0.000	0.016	0.016	2.51	1.31	1.19	1.17				
4.33	0.051	0.000	0.015	0.015	2.29	1.23	1.05	0.99				
5.33	0.043	0.000	0.013	0.013	2.33	1.27	1.06	0.92				0
6.33	0.035	0.000	0.011	0.011	2.27	1.26	1.01	0.87				
7.33	0.029	0.000	0.011	0.011	2.18	1.26	0.92	0.79				
8.33	0.025	0.000	0.011	0.011	2.11	1.28	0.83	0.77				
9.33	0.000	0.170	0.090	0.260	2.04	1.30	0.74	0.75	0.016	0.107	0.064	
10.33	0.000	0.148	0.106	0.253	2.01	1.28	0.73	0.77				
11.33	0.000	0.118	0.125	0.243	1.93	1.21	0.72	0.78				
12.33	0.005	0.091	0.137	0.228	1.99	1.28	0.70	0.89				
13.33	0.009	0.068	0.148	0.216	1.97	1.27	0.70	0.84				
14.33	0.011	0.053	0.155	0.209	1.96	1.27	0.69	0.85	0.036	0.172	0.062	
15.33	0.007	0.045	0.159	0.204	1.92	1.24	0.68	0.85				
16.33	0.004	0.039	0.159	0.198	1.96	1.27	0.69	0.86				
17.33	0.000	0.032	0.164	0.196	1.97	1.23	0.74	0.80				
18.33	0.000	0.032	0.163	0.195	2.00	1.26	0.74	0.81				
19.33	0.000	0.032	0.161	0.194	2.00	1.22	0.78	0.80				
20.33	0.000	0.032	0.158	0.190	2.01	1.23	0.78	0.79				
21.33	0.000	0.033	0.158	0.191	2.00	1.24	0.76	0.80				
22.33	0.000	0.032	0.155	0.187	2.02	1.23	0.79	0.78				
23.33	0.000	0.033	0.153	0.186	2.01	1.21	0.80	0.79				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.33		0.00	0.00			
1.33	12.2	0.00	0.00			
2.33		0.00	0.00			
3.33		0.00	0.00			
4.33	11.7	0.00	0.00			
5.33		0.00	0.00			
6.33		0.01	0.20			
7.33	11.7	0.22	5.00			
8.33		0.44	22.60			
9.33		0.48	49.80	59.93		9.00
10.33	16.1	0.57	80.40			
11.33		0.56	114.40			
12.33		0.41	145.00			
13.33	21.7	0.33	168.00			
14.33		0.17	184.60			
15.33		0.10	193.40			
16.33	21.1	0.03	198.00			
17.33		0.00	199.20			
18.33		0.00	199.20			
19.33	16.7	0.00	199.20			
20.33		0.00	199.20			
21.33		0.00	199.20			
22.33	15.6	0.00	199.20			
23.33		0.00	199.20			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* A second reactant injection took place at 0830 EST, 29 October 75. The target injection was 0.250 ppm NO_x.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 5 OF 4 10-30-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.33	0.000	0.032	0.150	0.182	2.01	1.21	0.80	0.76				
1.33	0.000	0.032	0.149	0.181	2.01	1.21	0.80	0.80				
2.33	0.000	0.032	0.148	0.180	2.01	1.22	0.79	0.78				
3.33	0.000	0.032	0.143	0.175	2.00	1.23	0.77	0.78				
4.33	0.000	0.030	0.142	0.172	2.01	1.21	0.80	0.71				
5.33	0.000	0.029	0.139	0.168	2.03	1.30	0.73	0.72				0
6.33	0.000	0.028	0.137	0.165	2.04	1.32	0.72	0.76				
7.33	0.003	0.032	0.126	0.158	2.03	1.30	0.73	0.76				
8.33	0.012	0.037	0.114	0.152	2.02	1.30	0.72	0.78				
9.33	0.019	0.041	0.103	0.143	2.00	1.29	0.71	0.76				
10.33	0.026	0.035	0.102	0.137	1.99	1.30	0.69	0.81	0.046	0.098	0.016	
11.33	0.032	0.030	0.097	0.127	1.96	1.30	0.66	0.85				
12.33	0.037	0.024	0.098	0.122	1.95	1.29	0.66	0.78				
13.33	0.042	0.019	0.096	0.116	1.95	1.29	0.66	0.81				
14.33	0.045	0.015	0.094	0.109	1.92	1.26	0.66	0.77				
15.33	0.044	0.011	0.093	0.104	1.92	1.28	0.64	0.82	0.065	0.091	0.014	
16.33	0.032				1.93	1.29	0.64	0.77				
17.33	0.021	0.000	0.096	0.096	1.98	1.29	0.69	0.77				
18.33	0.016	0.000	0.088	0.088	1.99	1.27	0.72	0.75				
19.33	0.013	0.000	0.082	0.082	1.96	1.24	0.72	0.72				
20.33	0.011	0.000	0.078	0.078	1.98	1.23	0.75	0.67				
21.33	0.009	0.000	0.074	0.074	1.99	1.24	0.75	0.65				
22.33	0.007	0.000	0.072	0.072	2.01	1.24	0.77	0.61				
23.33	0.006	0.000	0.068	0.068	2.01	1.19	0.82	0.59				

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.33		0.00	0.00			
1.33	15.6	0.00	0.00			
2.33		0.00	0.00			
3.33		0.00	0.00			
4.33	15.0	0.00	0.00			
5.33		0.00	0.00			
6.33		0.02	0.40			
7.33	12.8	0.12	5.60			
8.33		0.41	16.60			
9.33		0.68	46.60			
10.33	14.4	0.86	91.00			
11.33		0.96	144.60			
12.33		0.97	202.40			
13.33	15.0	0.88	258.80			
14.33		0.70	308.00			
15.33		0.47	345.40			
16.33	15.6	0.18	367.80			
17.33		0.03	375.60			
18.33		0.01	377.00			
19.33	10.6	0.00	377.40			
20.33		0.00	377.40			
21.33		0.00	377.40			
22.33	6.1	0.00	377.40			
23.33		0.00	377.40			

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PTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 4 OF 4 10-31-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.33	0.005	0.000	0.065	0.065	2.00	1.20	0.80	0.55				
1.33	0.004	0.000	0.064	0.064	2.01	1.25	0.76	0.59				
2.33	0.003	0.000	0.062	0.062	2.01	1.31	0.70	0.50				
3.33	0.003	0.000	0.062	0.062	2.01	1.32	0.69	0.47				
4.33	0.002	0.000	0.061	0.061	2.01	1.33	0.68	0.44				
5.33	0.001	0.000	0.059	0.059								
6.33	0.002	0.000	0.058	0.058								
7.33	0.012	0.000	0.047	0.051								
8.33	0.018	0.010	0.040	0.049								
9.33	0.025	**	**	**	2.01	1.60	0.41	1.32				
10.33	0.029	**	**	**	1.99	1.65	0.34	1.43				
11.33	0.037	**	**	**	1.92	1.55	0.37	1.12				
12.33	0.048	**	**	**	1.97	1.58	0.39	1.53				
13.33	0.057	**	**	**	1.96	1.58	0.38	1.42				
14.33	0.062	**	**	**	1.93	1.61	0.32	1.44				
15.33	0.063	**	**	**								
16.33												
17.33												
18.33												
19.33												
20.33												
21.33												
22.33												
23.33												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.33		0.00	0.00			
1.33	2.8	0.00	0.00			
2.33		0.00	0.00			
3.33		0.00	0.00			
4.33	1.7	0.00	0.00			
5.33		0.00	0.00			
6.33		0.01	0.20			
7.33	0.6	0.17	4.00			
8.33		0.44	19.60			
9.33		0.68	50.80			
10.33	7.2	0.86	95.20			
11.33		0.97	149.00			
12.33		0.98	207.40			
13.33	11.1	0.87	264.00			
14.33		0.70	312.80			
15.33		0.45	349.80			
16.33	12.2	0.17	371.20			
17.33		0.01	378.20			
18.33		0.00	378.60			
19.33	3.3	0.00	378.60			
20.33		0.00	378.60			
21.33		0.00	378.60			
22.33	1.7	0.00	378.60			
23.33		0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 12.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] after 0900 EST, 31 October 75, due to calibration adjustments.

** Data suspect and deleted.

RTI OUTDOOR SNUG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 4 10-28-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50	0.000	0.000	0.000	0.000	1.65	1.46	0.19	0.59				
1.50	0.000	0.000	0.000	0.000	1.65	1.46	0.18	0.52				
2.50	0.000	0.000	0.000	0.000	1.76	1.47	0.29	9.42				
3.50	0.000	0.183	0.046	0.229	4.59	1.46	3.13	9.33				
4.50	0.000	0.183	0.045	0.228	4.50	1.34	3.16	9.00				
5.50	0.000	0.181	0.045	0.226	5.13	1.44	3.69	9.34				0
6.50	0.000	0.180	0.045	0.225	5.13	1.43	3.70	9.42				
7.50	0.000	0.157	0.067	0.225	5.13	1.44	3.69	9.34				
8.50	0.000	0.047	0.165	0.212	4.96	1.44	3.52	9.34				
9.50	0.121	0.005	0.160	0.166	5.00	1.45	3.55	8.19				
10.50	0.214	0.003	0.122	0.125	4.10	1.46	2.64	7.30	0.213	0.133	0.112	
11.50	0.299	0.001	0.090	0.091	3.67	1.41	2.26	6.10				
12.50	0.353	0.000	0.070	0.070	3.34	1.37	1.97	5.32				
13.50	0.328	0.000	0.056	0.056	3.13	1.37	1.76	4.75				
14.50	0.303	0.000	0.046	0.046	2.84	1.32	1.52	4.03				
15.50	0.264	0.000	0.040	0.040	2.75	1.37	1.38	3.79				
16.50	0.221	0.000	0.032	0.032	2.57	1.36	1.21	3.19	0.242	0.011	0.048	
17.50	0.179	0.000	0.025	0.025	2.46	1.45	1.01	2.91				
18.50	0.144	0.000	0.020	0.020	2.38	1.43	0.95	2.60				0
19.50	0.118	0.000	0.017	0.017	2.32	1.45	0.88	2.35				
20.50	0.096	0.000	0.015	0.015	2.19	1.36	0.83	2.14				
21.50	0.081	0.000	0.012	0.012	2.12	1.43	0.69	1.92				
22.50	0.067	0.000	0.012	0.012	2.09	1.44	0.65	1.66				
23.50	0.053	0.000	0.010	0.010	2.03	1.43	0.60	1.52				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.50	13.9	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	14.4	0.00	0.00			
5.50		0.00	0.00			
6.50		0.01	0.30			
7.50	15.0	0.09	5.30			
8.50		0.35	16.50	65.70	8.50	
9.50		0.50	42.00			
10.50	18.9	0.63	75.90			
11.50		0.69	115.50			
12.50		0.85	161.70			
13.50	21.1	0.34	197.40			
14.50		0.58	225.00			
15.50		0.47	256.50			
16.50	21.7	0.12	274.20			
17.50		0.01	278.10			
18.50		0.00	278.40			
19.50	16.7	0.00	278.40			
20.50		0.00	278.40			
21.50		0.00	278.40			
22.50	14.4	0.00	278.40			
23.50		0.00	278.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] prior to 1100 EST, 28 October 75, partially due to range changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 4 10-29-75

MIX, NOX SLUG * 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50	0.036	0.000	0.007	0.007	2.00	1.40	0.60	1.28				
1.50	0.028	0.000	0.006	0.006	1.89	1.40	0.49	1.19				
2.50	0.021	0.000	0.006	0.006	1.87	1.38	0.50	1.01				
3.50	0.017	0.000	0.005	0.005	1.79	1.35	0.45	0.94				
4.50	0.014	0.000	0.004	0.004	1.83	1.35	0.48	1.00				
5.50	0.011	0.000	0.004	0.004	1.76	1.34	0.43	0.70				180
6.50	0.007	0.000	0.002	0.002	1.74	1.32	0.42	0.67				
7.50	0.006	0.000	0.004	0.004	1.69	1.32	0.37	0.61				
8.50	0.000	0.188	0.067	0.256	1.68	1.36	0.32	0.62				
9.50	0.000	0.180	0.073	0.252	1.67	1.34	0.33	0.60	0.011	0.071	0.029	
10.50	0.000	0.169	0.077	0.246	1.65	1.38	0.27	0.61				
11.50	0.000	0.158	0.077	0.235	1.67	1.37	0.30	0.62				
12.50	0.000	0.150	0.078	0.228	1.62	1.34	0.28	0.69				
13.50	0.000	0.144	0.080	0.225	1.61	1.35	0.26	0.71				
14.50	0.000	0.142	0.080	0.222	1.67	1.36	0.31	0.71	0.015	0.089	0.011	
15.50	0.000	0.142	0.080	0.222	1.61	1.34	0.27	0.75				
16.50	0.000	0.139	0.078	0.217	1.62	1.36	0.26	0.78				
17.50	0.000	0.139	0.079	0.218	1.62	1.36	0.26	0.70				
18.50	0.000	0.139	0.078	0.217	1.66	1.33	0.33	0.70				
19.50	0.000	0.138	0.077	0.215	1.69	1.33	0.36	0.77				
20.50	0.000	0.137	0.076	0.213	1.68	1.31	0.37	0.68				
21.50	0.000	0.139	0.075	0.214	1.68	1.33	0.35	0.68				
22.50	0.000	0.138	0.073	0.211	1.69	1.28	0.40	0.62				0
23.50	0.000	0.136	0.074	0.210	1.68	1.31	0.37	0.68				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.50	12.2	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	11.7	0.00	0.00			
5.50		0.00	0.00			
6.50		0.01	0.30			
7.50	11.7	0.08	3.00			
8.50		0.22	12.00	65.70		8.50
9.50		0.44	31.80			
10.50	16.1	0.48	59.40			
11.50		0.57	90.90			
12.50		0.56	124.80			
13.50	21.7	0.41	155.90			
14.50		0.33	176.10			
15.50		0.17	191.10			
16.50	21.1	0.10	199.20			
17.50		0.03	203.10			
18.50		0.00	204.00			
19.50	16.7	0.00	204.00			
20.50		0.00	204.00			
21.50		0.00	204.00			
22.50	15.6	0.00	204.00			
23.50		0.00	204.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* A second reactant injection took place at 0830 EST, 29 October 75. The target injection was 0.250 ppm.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 4 10-30-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50	0.000	0.136	0.073	0.209	1.67	1.28	0.39	0.69				
1.50	0.000	0.135	0.071	0.205	1.69	1.30	0.39	0.65				
2.50	0.000	0.134	0.071	0.204	1.68	1.28	0.40	0.62				
3.50	0.000	0.134	0.070	0.203	1.69	1.27	0.42	0.60				
4.50	0.000	0.132	0.068	0.200	1.68	1.27	0.41	0.61				0
5.50	0.000	0.130	0.065	0.196	1.72	1.40	0.32	0.66				
6.50	0.000	0.128	0.067	0.196	1.72	1.37	0.35	0.64				
7.50	0.000	0.128	0.066	0.195	1.73	1.35	0.37	0.65				
8.50	0.000	0.126	0.063	0.189	1.74	1.38	0.36	0.74				
9.50	0.001	0.123	0.062	0.185	1.70	1.35	0.35	0.67				
10.50	0.002	0.118	0.059	0.176	1.69	1.35	0.33	0.70	0.015	0.058	0.004	
11.50	0.001	0.110	0.060	0.170	1.67	1.34	0.32	0.70				
12.50	0.003	0.105	0.060	0.165	1.66	1.34	0.31	0.67				
13.50	0.003	0.098	0.059	0.157	1.68	1.35	0.33	0.67				
14.50	0.002	0.093	0.060	0.153	1.66	1.33	0.32	0.67				
15.50	0.000	0.089	0.060	0.149	1.67	1.35	0.32	0.71	0.015	0.066	0.021	
16.50	0.000	0.086	0.062	0.148	1.69	1.35	0.34	0.69				
17.50	0.000	0.081	0.062	0.143	1.74	1.34	0.39	0.66				
18.50	0.000	0.081	0.062	0.143	1.74	1.31	0.43	0.60				
19.50	0.000	0.080	0.060	0.140	1.73	1.29	0.44	0.57				
20.50	0.000	0.079	0.060	0.139	1.74	1.29	0.44	0.57				
21.50	0.000	0.079	0.059	0.138	1.75	1.29	0.46	0.54				
22.50	0.000	0.078	0.059	0.137	1.74	1.26	0.48	0.47				
23.50	0.000	0.076	0.058	0.134	1.76	1.20	0.56	0.45				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.50	15.6	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	15.0	0.00	0.00			
5.50		0.00	0.00			
6.50		0.02	0.60			
7.50	12.8	0.12	4.80			
8.50		0.41	20.70			
9.50		0.68	53.40			
10.50	14.4	0.86	99.60			
11.50		0.96	154.20			
12.50		0.97	212.10			
13.50	15.0	0.88	267.60			
14.50		0.70	315.00			
15.50		0.47	350.10			
16.50	15.6	0.18	369.60			
17.50		0.03	375.90			
18.50		0.01	377.10			
19.50	10.6	0.00	377.40			
20.50		0.00	377.40			
21.50		0.00	377.40			
22.50	6.1	0.00	377.40			
23.50		0.00	377.40			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 4 OF 4 10-31-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50	0.000	0.075	0.057	0.132	1.75	1.26	0.49	0.42				
1.50	0.000	0.075	0.057	0.132	1.79	1.34	0.45	0.43				
2.50	0.000	0.075	0.056	0.130	1.78	1.35	0.43	0.36				
3.50	0.000	0.074	0.056	0.129	1.74	1.35	0.39	0.28				
4.50	0.000	0.075	0.055	0.129	1.76	1.36	0.39	0.25				
5.50	0.000	0.073	0.055	0.127								
6.50	0.000	0.073	0.055	0.127								
7.50	0.000	0.075	0.052	0.127								
8.50	0.003	0.076	0.047	0.123								
9.50	0.004	**	**	**	1.80	1.68	0.13	1.31				
10.50	0.004	**	**	**	1.78	1.69	0.09	1.26				
11.50	0.004	**	**	**	1.67	1.56	0.11	0.91				
12.50	0.005	**	**	**	1.80	1.60	0.20	1.42				
13.50	0.004	**	**	**	1.78	1.65	0.13	1.34				
14.50	0.004	**	**	**	1.77	1.68	0.09	1.41				
15.50												
16.50												
17.50												
18.50												
19.50												
20.50												
21.50												
22.50												
23.50												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.50	2.8	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	1.7	0.00	0.00			
5.50		0.00	0.00			
6.50		0.01	0.30			
7.50	0.6	0.17	5.70			
8.50		0.44	24.00			
9.50		0.68	57.60			
10.50	7.2	0.86	105.80			
11.50		0.97	158.70			
12.50		0.98	217.20			
13.50	11.1	0.87	272.70			
14.50		0.70	319.80			
15.50		0.45	354.30			
16.50	12.2	0.17	372.90			
17.50		0.01	378.30			
18.50		0.00	378.60			
19.50	3.5	0.00	378.60			
20.50		0.00	378.60			
21.50		0.00	378.60			
22.50	1.7	0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 12.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] after 0900 EST 31 October 75, due to calibration adjustments.

** Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 4 10-28-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.67	0.000	0.000	0.000	0.000	1.31	1.06	0.26	0.54				
1.67	0.000	0.000	0.000	0.000	1.25	1.02	0.23	0.52				
2.67	0.000	0.017	0.136	0.153	1.43	1.01	0.42	9.26				
3.67	0.000	0.572	0.136	0.708	3.57	0.99	2.58	9.54				
4.67	0.000	0.560	0.137	0.697	5.44	0.94	4.51	9.01				150
5.67	0.000	0.547	0.142	0.689	6.26	0.99	5.26	9.25				
6.67	0.000	0.532	0.148	0.679	6.19	0.99	5.20	9.01				
7.67	0.000	0.492	0.178	0.670	6.16	0.99	5.18	9.01				
8.67	0.000	0.364	0.268	0.632	5.89	1.00	4.89	8.76				
9.67	0.000	0.159	0.369	0.528	5.18	1.04	4.15	7.69				
10.67	0.063	0.034	0.385	0.419	4.57	1.00	3.57	6.55	0.090	0.214	0.098	
11.67	0.155	0.007	0.321	0.328	3.95	0.98	2.97	5.49				
12.67	0.241	0.002	0.244	0.246	3.45	0.96	2.49	4.73				
13.67	0.267	0.001	0.182	0.183	3.08	0.99	2.09	4.17				
14.67	0.288	0.000	0.136	0.136	2.80	0.96	1.84	3.72				
15.67	0.265	0.000	0.102	0.102	2.56	0.98	1.58	3.25				
16.67	0.215	0.000	0.070	0.070	2.32	1.00	1.32	2.79	0.243	0.055	0.088	60
17.67	0.166	0.000	0.043	0.043	2.19	1.01	1.18	2.51				
18.67	0.133	0.000	0.030	0.030	2.09	1.01	1.09	2.31				
19.67	0.108	0.000	0.022	0.022	1.95	1.02	0.93	2.04				
20.67	0.089	0.000	0.019	0.019	1.89	1.02	0.87	2.02				
21.67	0.075	0.000	0.016	0.016	1.75	1.01	0.72	1.68				0
22.67	0.060	0.000	0.014	0.014	1.69	0.99	0.70	1.44				
23.67	0.049	0.000	0.011	0.011	1.62	0.97	0.64	1.51				

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.67		0.00	0.00			
1.67	13.9	0.00	0.00			
2.67		0.00	0.00			
3.67		0.00	0.00			
4.67	14.4	0.00	0.00			
5.67		0.00	0.00			
6.67		0.01	0.40			
7.67	15.0	0.09	4.20			
8.67		0.35	20.00	58.05	8.67	
9.67		0.50	47.00			
10.67	18.9	0.63	82.20			
11.67		0.69	122.40			
12.67		0.85	170.20			
13.67	21.1	0.34	200.80			
14.67		0.58	250.80			
15.67		0.47	291.20			
16.67	21.7	0.12	275.40			
17.67		0.01	278.20			
18.67		0.00	278.40			
19.67	16.7	0.00	278.40			
20.67		0.00	278.40			
21.67		0.00	278.40			
22.67	14.4	0.00	278.40			
23.67		0.00	278.40			

* Shifts in [THC], [CH_4], [NMHC] and [CO] prior to 1100 EST, 28 October 75, partially due to range changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 4 10-29-75

MIX, NOX SLUG * 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.67	0.041	0.000	0.010	0.010	1.53	0.93	0.60	1.18				
1.67	0.032	0.000	0.009	0.009	1.44	0.90	0.54	0.99				
2.67	0.027	0.000	0.007	0.007	1.40	0.89	0.51	0.89				
3.67	0.021	0.000	0.006	0.006	1.32	0.86	0.46	0.78				
4.67	0.017	0.000	0.005	0.005	1.39	0.86	0.53	0.70				0
5.67	0.013	0.000	0.005	0.005	1.27	0.81	0.45	0.61				
6.67	0.011	0.000	0.004	0.004	1.26	0.81	0.44	0.60				
7.67	0.010	0.000	0.004	0.004	1.19	0.81	0.38	0.59				
8.67	0.011	0.000	0.005	0.005	1.17	0.82	0.35	0.58				
9.67	0.000	0.193	0.068	0.261	1.13	0.82	0.31	0.58	0.013	**	0.032	
10.67	0.000	0.184	0.074	0.258	1.12	0.84	0.28	0.59				
11.67	0.000	0.168	0.080	0.248	1.20	0.87	0.33	0.80				
12.67	0.000	0.156	0.083	0.240	1.16	0.85	0.31	0.69				
13.67	0.000	0.149	0.083	0.232	1.14	0.87	0.27	0.67				
14.67	0.000	0.141	0.084	0.226	1.20	0.87	0.33	0.68	0.013	0.074	0.029	
15.67	0.000	0.137	0.083	0.220	1.19	0.87	0.32	0.69				
16.67	0.000	0.133	0.083	0.216	1.20	0.87	0.33	0.67				
17.67	0.000	0.133	0.081	0.214	1.19	0.86	0.33	0.65				
18.67	0.000	0.130	0.082	0.213	1.22	0.87	0.35	0.68				
19.67	0.000	0.132	0.080	0.212	1.29	0.88	0.41	0.73				
20.67	0.000	0.130	0.081	0.212	1.24	0.86	0.38	0.62				
21.67	0.000	0.129	0.080	0.210	1.29	0.87	0.42	0.66				
22.67	0.000	0.128	0.077	0.205	1.28	0.86	0.42	0.60				0
23.67	0.000	0.128	0.078	0.206	1.28	0.90	0.38	0.66				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.67		0.00	0.00			
1.67	12.2	0.00	0.00			
2.67		0.00	0.00			
3.67		0.00	0.00			
4.67	11.7	0.00	0.00			
5.67		0.00	0.00			
6.67		0.01	0.40			
7.67	11.7	0.08	3.80			
8.67		0.22	14.20			
9.67		0.44	36.20	58.05		9.00
10.67	16.1	0.48	64.20			
11.67		0.57	96.60			
12.67		0.56	130.40			
13.67	21.7	0.41	158.00			
14.67		0.33	179.40			
15.67		0.17	192.80			
16.67	21.1	0.10	200.20			
17.67		0.03	203.40			
18.67		0.00	204.00			
19.67	16.7	0.00	204.30			
20.67		0.00	204.00			
21.67		0.00	204.00			
22.67	15.6	0.00	204.00			
23.67		0.00	204.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* A second reactant injection took place at 0830 EST, 29 October 75. The target injection was 0.250 ppm.

** Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 5 OF 4 10-30-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.67	0.000	0.126	0.077	0.203	1.27	0.86	0.41	0.61				
1.67	0.000	0.124	0.076	0.200	1.50	0.87	0.43	0.63				
2.67	0.000	0.120	0.074	0.194	1.28	0.66	0.62	0.61				
3.67	0.000	0.118	0.073	0.190	1.30	0.87	0.43	0.60				
4.67	0.000	0.114	0.071	0.185	1.31	0.87	0.44	0.60				
5.67	0.000	0.109	0.070	0.179	1.35	0.96	0.39	0.59				170
6.67	0.000	0.105	0.066	0.171	1.37	0.97	0.40	0.64				
7.67	0.000	0.101	0.062	0.163	1.37	0.99	0.38	0.64				
8.67	0.000	0.093	0.059	0.152	1.39	1.00	0.40	0.67				
9.67	0.002	0.083	0.059	0.142	1.37	1.01	0.37	0.67				
10.67	0.003	0.082	0.059	0.141	1.38	1.02	0.36	0.64	0.014	0.036	0.021	
11.67	0.004	0.075	0.059	0.134	1.36	1.05	0.31	0.65				
12.67	0.005	0.066	0.059	0.125	1.39	1.07	0.32	0.68				
13.67	0.006	0.059	0.061	0.120	1.41	1.07	0.34	0.66				
14.67	0.005	0.051	0.062	0.113	1.38	1.06	0.33	0.64				
15.67	0.004	0.044	0.062	0.106	1.41	1.08	0.33	0.68	0.019	0.061	0.014	
16.67	0.000	0.037	0.064	0.102	1.43	1.07	0.36	0.65				
17.67	0.000	0.033	0.065	0.098	1.49	1.09	0.41	0.71				
18.67	0.000	0.032	0.065	0.097	1.49	1.10	0.40	0.66				
19.67	0.000	0.032	0.064	0.096	1.49	1.10	0.40	0.61				
20.67	0.000	0.030	0.064	0.094	1.52	1.05	0.47	0.51				
21.67	0.000	0.030	0.062	0.092	1.52	1.06	0.46	0.53				
22.67	0.000	0.029	0.061	0.090	1.52	1.02	0.50	0.46				
23.67	0.000	0.028	0.061	0.089	1.53	1.02	0.52	0.49				

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.67		0.00	0.00			
1.67	15.6	0.00	0.00			
2.67		0.00	0.00			
3.67		0.00	0.00			
4.67	15.0	0.00	0.00			
5.67		0.00	0.00			
6.67		0.02	0.80			
7.67	12.8	0.12	6.00			
8.67		0.41	24.80			
9.67		0.68	60.20			
10.67	14.4	0.86	108.20			
11.67		0.96	165.80			
12.67		0.97	221.80			
13.67	15.0	0.88	276.40			
14.67		0.70	322.00			
15.67		0.47	354.80			
16.67	15.6	0.18	371.40			
17.67		0.03	376.20			
18.67		0.01	377.20			
19.67	10.6	0.00	377.40			
20.67		0.00	377.40			
21.67		0.00	377.40			
22.67	6.1	0.00	377.40			
23.67		0.00	377.40			

CHAMBER NUMBER 3
DAY 4 OF 4 10-31-75

MIX, NOX SLOG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NOXI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.67	0.000	0.027	0.059	0.086	1.55	1.04	0.51	0.44				
1.67	0.000	0.027	0.058	0.084	1.56	1.11	0.44	0.40				
2.67	0.000	0.026	0.057	0.082	1.58	1.10	0.48	0.36				
3.67	0.000	0.026	0.057	0.082	1.56	1.18	0.38	0.41				
4.67	0.000	0.025	0.057	0.081	1.58	1.12	0.45	0.37				
5.67	0.000	0.024	0.055	0.078								
6.67	0.000	0.026	0.056	0.081								
7.67	0.004	0.032	0.046	0.078								
8.67	0.009	**	**	**								
9.67	0.010	**	**	**	1.66	1.51	0.15	1.31				
10.67	0.011	**	**	**	1.62	1.51	0.11	1.29				
11.67	0.011	**	**	**	1.43	1.26	0.18	0.64				
12.67	0.015	**	**	**	1.62	1.48	0.14	1.37				
13.67	0.014	**	**	**	1.60	1.49	0.11	1.32				
14.67	0.014	**	**	**	1.57	1.55	0.02	1.41				
15.67												
16.67												
17.67												
18.67												
19.67												
20.67												
21.67												
22.67												
23.67												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.67		0.00	0.00			
1.67	7.8	0.00	0.00			
2.67		0.00	0.00			
3.67		0.00	0.00			
4.67	1.7	0.00	0.00			
5.67		0.00	0.00			
6.67		0.01	0.00			
7.67	0.6	0.17	7.40			
8.67		0.40	28.40			
9.67		0.68	68.40			
10.67	7.2	0.86	112.40			
11.67		0.97	168.00			
12.67		0.98	227.00			
13.67	11.1	0.87	281.40			
14.67		0.70	329.80			
15.67		0.35	358.80			
16.67	12.2	0.17	374.60			
17.67		0.01	378.20			
18.67		0.00	378.60			
19.67	5.5	0.00	378.60			
20.67		0.00	378.60			
21.67		0.00	378.60			
22.67	1.7	0.00	378.60			
23.67		0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 12.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] after 0900 EST, 31 October 75, due to calibration adjustments

** Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 4 10-28-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.000	0.000	0.000	0.000	1.40	1.16	0.24	0.61				
1.83	0.000	0.000	0.000	0.000	1.36	1.17	0.19	0.58				
2.83	0.000	0.003	0.018	0.021	1.50	1.14	0.37	9.34				
3.83	0.000	0.086	0.017	0.103	1.47	1.11	0.36	9.26				
4.83	0.000	0.084	0.017	0.102	2.02	1.10	0.93	9.34				
5.83	0.000	0.083	0.016	0.099	2.13	1.14	0.99	9.34				130
6.83	0.000	0.083	0.016	0.099	2.12	1.13	1.00	9.26				
7.83	0.000	0.078	0.021	0.099	2.13	1.11	1.02	9.26				
8.83	0.000	0.056	0.033	0.089	2.05	1.18	0.87	8.85				
9.83	0.000	0.027	0.048	0.075	2.00	1.17	0.83	7.62				
10.83	0.040	0.011	0.051	0.062	1.91	1.14	0.77	6.54	0.025	0.057	0.010	
11.83	0.075	0.006	0.043	0.049	1.80	1.09	0.71	5.44				
12.83	0.101	0.004	0.034	0.039	1.74	1.09	0.65	4.68				
13.83	0.107	0.003	0.027	0.030	1.71	1.11	0.60	4.05				
14.83	0.109	0.002	0.021	0.024	1.74	1.12	0.62	3.69				
15.83	0.098	0.003	0.017	0.020	1.67	1.14	0.53	3.19				
16.83	0.080	0.001	0.013	0.014	1.67	1.16	0.51	2.72	0.081	0.015	0.014	
17.83	0.062	0.000	0.011	0.011	1.72	1.22	0.50	2.42				70
18.83	0.049	0.000	0.009	0.009	1.69	1.22	0.46	2.25				
19.83	0.051	0.000	0.006	0.006	1.69	1.24	0.44	1.97				
20.83	0.032	0.000	0.005	0.005	1.73	1.21	0.52	1.84				
21.83	0.026	0.000	0.004	0.004	1.68	1.04	0.64	1.58				
22.83	0.021	0.000	0.002	0.002	1.69	1.23	0.46	1.40				0
23.83	0.016	0.000	0.002	0.002	1.68	1.20	0.48	1.21				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.83	13.9	0.00	0.00			
2.83		0.00	0.00			
3.83		0.00	0.00			
4.83	14.4	0.00	0.00			
5.83		0.00	0.00			
6.83		0.01	0.50			
7.83	15.0	0.09	5.10			
8.83		0.35	23.50	62.58	8.83	
9.83		0.50	52.00			
10.83	18.9	0.63	88.50			
11.83		0.69	129.30			
12.83		0.85	178.70			
13.83	21.1	0.34	204.20			
14.83		0.58	236.60			
15.83		0.47	265.90			
16.83	21.7	0.12	276.60			
17.83		0.01	278.50			
18.83		0.00	278.40			
19.83	16.7	0.00	278.40			
20.83		0.00	278.40			
21.83		0.00	278.40			
22.83	14.4	0.00	278.40			
23.83		0.00	278.40			

% POSSIBLE MINUTES OF SUNSHINE 46

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] prior to 1100 EST, 28 October 75, partially due to range changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 4 10-29-75

MIX, NOX SLUG * 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.011	0.000	0.001	0.001	1.66	1.23	0.43	1.11				
1.83	0.009	0.000	0.001	0.001	1.59	1.20	0.39	0.99				
2.83	0.005	0.000	0.001	0.001	1.60	1.20	0.40	0.90				
3.83	0.005	0.000	0.000	0.000	1.58	1.15	0.43	0.62				
4.83	0.004	0.000	0.000	0.000	1.65	1.19	0.46	0.86				0
5.83	0.004	0.000	0.000	0.000	1.58	1.16	0.42	0.70				
6.83	0.002	0.000	0.000	0.000	1.58	1.16	0.42	0.61				
7.83	0.002	0.000	0.000	0.000	1.55	1.16	0.39	0.60				
8.83	0.001	0.225	0.053	0.278	1.53	1.18	0.35	0.64				
9.83	0.001	0.222	0.053	0.276	1.50	1.19	0.31	0.62				
10.83	0.000	0.215	0.050	0.265	1.46	1.14	0.32	0.45	0.010	0.056	0.012	
11.83	0.000	0.207	0.051	0.259	1.50	1.18	0.32	0.74				
12.83	0.000	0.204	0.051	0.256	1.47	1.18	0.29	0.61				
13.83	0.000	0.201	0.052	0.253	1.47	1.17	0.30	0.58				
14.83	0.000	0.198	0.052	0.250	1.50	1.17	0.33	0.58	0.009	0.053	0.003	
15.83	0.000	0.196	0.052	0.248	1.50	1.17	0.33	0.63				
16.83	0.000	0.196	0.052	0.248	1.52	1.18	0.34	0.69				
17.83	0.000	0.194	0.051	0.245	1.51	1.17	0.34	0.62				
18.83	0.000	0.194	0.052	0.246	1.52	1.17	0.35	0.60				
19.83	0.000	0.190	0.051	0.242	1.58	1.17	0.41	0.57				
20.83	0.000	0.193	0.050	0.243	1.59	1.16	0.43	0.60				
21.83	0.000	0.189	0.050	0.240	1.63	1.16	0.47	0.59				
22.83	0.000	0.188	0.050	0.238	1.58	1.15	0.43	0.59				0
23.83	0.000	0.187	0.050	0.237	1.59	1.16	0.43	0.60				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.83	12.2	0.00	0.00			
2.83		0.00	0.00			
3.83		0.00	0.00			
4.83	11.7	0.00	0.00			
5.83		0.00	0.00			
6.83		0.01	0.50			
7.83	11.7	0.08	4.60			
8.83		0.22	16.40			
9.83		0.84	40.60	62.58		9.00
10.83	16.1	0.48	69.00			
11.83		0.57	102.30			
12.83		0.56	136.00			
13.83	21.7	0.41	162.10			
14.83		0.33	182.70			
15.83		0.17	194.50			
16.83	21.1	0.10	201.20			
17.83		0.03	203.70			
18.83		0.00	204.00			
19.83	16.7	0.00	204.00			
20.83		0.00	204.00			
21.83		0.00	204.00			
22.83	15.6	0.00	204.00			
23.83		0.00	204.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 22.8 CENT

* A second reactant injection took place at 0830 EST, 29 October 75. The target injection was 0.250 ppm.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 4 10-30-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.000	0.184	0.050	0.234	1.59	1.14	0.45	0.57				
1.83	0.000	0.183	0.048	0.231	1.60	1.18	0.42	0.62				
2.83	0.000	0.182	0.048	0.230	1.60	1.13	0.47	0.59				
3.83	0.000	0.180	0.046	0.226	1.61	1.15	0.46	0.58				
4.83	0.000	0.174	0.046	0.220	1.61	1.13	0.48	0.59				
5.83	0.000	0.172	0.046	0.218	1.63	1.23	0.40	0.54				0
6.83	0.000	0.170	0.045	0.215	1.64	1.22	0.41	0.55				
7.83	0.000	0.164	0.047	0.211	1.63	1.18	0.44	0.46				
8.83	0.000	0.158	0.049	0.207	1.62	1.20	0.41	0.56				
9.83	0.000	0.157	0.050	0.207	1.60	1.22	0.38	0.56				
10.83	0.000	0.150	0.052	0.202	1.62	1.22	0.40	0.55	0.009	0.048	0.004	
11.83	0.000	0.142	0.053	0.196	1.59	1.23	0.35	0.57				
12.83	0.000	0.136	0.053	0.189	1.58	1.22	0.36	0.55				
13.83	0.000	0.128	0.053	0.182	1.59	1.22	0.37	0.55				
14.83	0.000	0.124	0.053	0.178	1.59	1.21	0.38	0.54				
15.83	0.000	0.119	0.053	0.172	1.61	1.22	0.39	0.55	0.011	0.051	0.003	
16.83	0.000	0.116	0.055	0.170	1.64	1.22	0.42	0.52				
17.83	0.000	0.114	0.053	0.168	1.67	1.19	0.47	0.46				
18.83	0.000	0.111	0.052	0.164	1.65	1.18	0.46	0.45				
19.83	0.000	0.110	0.053	0.164	1.67	1.17	0.50	0.43				
20.83	0.000	0.109	0.052	0.161	1.69	1.18	0.51	0.46				
21.83	0.000	0.108	0.052	0.160	1.70	1.19	0.51	0.52				
22.83	0.000	0.107	0.051	0.158	1.69	1.13	0.56	0.40				
23.83	0.000	0.105	0.051	0.156	1.71	1.11	0.59	0.34				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	LUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.83	15.6	0.00	0.00			
2.83		0.00	0.00			
3.83		0.00	0.00			
4.83	15.0	0.00	0.00			
5.83		0.00	0.00			
6.83		0.02	1.00			
7.83	12.8	0.12	7.20			
8.83		0.41	28.90			
9.83		0.68	67.00			
10.83	14.4	0.86	116.80			
11.83		0.96	173.40			
12.83		0.97	231.50			
13.83	15.0	0.88	285.20			
14.83		0.70	329.00			
15.83		0.47	359.50			
16.83	15.6	0.18	373.20			
17.83		0.03	376.50			
18.83		0.01	377.30			
19.83	10.6	0.00	377.40			
20.83		0.00	377.40			
21.83		0.00	377.40			
22.83	6.1	0.00	377.40			
23.83		0.00	377.40			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 4 OF 4 10-31-75

MIX, NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC * (PPM)	CH4 * (PPM)	NMHC * (PPM)	CO * (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.83	0.000	0.104	0.051	0.155	1.72	1.16	0.56	0.32				
1.83	0.000	0.103	0.050	0.153	1.73	1.22	0.51	0.28				
2.83	0.000	0.102	0.050	0.152	1.73	1.71	0.01	0.29				
3.83	0.000	0.101	0.049	0.150	1.73	1.28	0.45	0.30				
4.83	0.000	0.099	0.049	0.149	1.73	1.26	0.47	0.29				
5.83	0.000	0.098	0.049	0.148								
6.83	0.000	0.097	0.049	0.147								
7.83	0.000	0.098	0.049	0.148								
8.83	0.000	**	**	**								
9.83	0.000	**	**	**	1.77	1.58	0.19	1.23				
10.83	0.001	**	**	**	1.72	1.58	0.14	1.23				
11.83	0.001	**	**	**	1.56	1.34	0.23	0.82				
12.83	0.001	**	**	**	1.72	1.55	0.18	1.24				
13.83	0.001	**	**	**	1.71	1.59	0.13	1.25				
14.83	0.001	**	**	**	1.70	1.60	0.10	1.33				
15.83												
16.83												
17.83												
18.83												
19.83												
20.83												
21.83												
22.83												
23.83												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.83		0.00	0.00			
1.83	2.8	0.00	0.00			
2.83		0.00	0.00			
3.83		0.00	0.00			
4.83	1.7	0.00	0.00			
5.83		0.00	0.00			
6.83		0.01	0.50			
7.83	0.6	0.17	9.10			
8.83		0.44	32.80			
9.83		0.68	71.20			
10.83	7.2	0.86	121.00			
11.83		0.77	176.10			
12.83		0.98	236.80			
13.83	11.1	0.87	290.10			
14.83		0.76	335.80			
15.83		0.45	363.30			
16.83	12.2	0.17	376.30			
17.83		0.01	378.50			
18.83		0.00	378.60			
19.83	3.3	0.00	378.60			
20.83		0.00	378.60			
21.83		0.00	378.60			
22.83	1.7	0.00	378.60			
23.83		0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 97

RDU AIRPORT MAXIMUM TEMPERATURE 12.8 CENT

* Shifts in [THC], [CH_4], [NMHC] and [CO] after 0900 EST, 31 October 75, due to calibration adjustments.

** Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 11- 4-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.000	0.000	0.000								
2.47	0.000	0.000	0.000	0.000	1.81	1.46	0.36	0.65				
3.47	0.000	0.000	0.000	0.000	1.82	1.48	0.34	0.58				
4.47	0.000	0.841	0.204	1.045	8.62	1.45	7.17	9.68				
5.47	0.000	0.817	0.214	1.031	9.63	1.40	8.23	9.51				
6.47	0.000	0.792	0.226	1.018	10.28	1.40	8.88	9.56				0
7.47	0.000	0.763	0.244	1.006	10.22	1.44	8.78	9.27				
8.47	0.000	0.671	0.321	0.991	10.08	1.45	8.63	9.17				
9.47	0.000	0.529	0.429	0.958	9.78	1.52	8.27	9.17				
10.47	0.049	0.079	0.791	0.871	9.23	1.56	7.67	9.09	0.112	0.667	0.185	
11.47	0.334	0.010	0.725	0.735	8.82	1.57	7.25	9.07				
12.47	0.643	0.004	0.571	0.575	8.22	1.63	6.60	8.95				
13.47	0.912	0.004	0.414	0.418	7.82	1.61	6.21	8.72				
14.47	1.020	0.003	0.311	0.314	7.48	1.55	5.94	8.58	0.908	0.061	0.120	0
15.47	0.973	0.003	0.258	0.261	7.19	1.55	5.63	8.49				
16.47	0.891	0.003	0.227	0.230								
17.47	0.813	0.002	0.210	0.212	6.92	1.45	5.47	8.05				
18.47	0.754	0.002	0.197	0.199	6.77	1.47	5.30	7.82				
19.47	0.703	0.002	0.183	0.185	6.60	1.51	5.09	7.66				
20.47	0.655	0.002	0.174	0.176	6.42	1.48	4.94	7.29				
21.47	0.617	0.001	0.160	0.161	6.30	1.44	4.86	7.13				
22.47	0.579	0.001	0.152	0.153	6.12	1.36	4.76	6.77				0
23.47	0.544	0.001	0.147	0.148	5.99	1.35	4.64	6.63				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	11.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	13.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	14.4	0.07	1.96			
8.47		0.13	7.84			
9.47		0.40	23.20			
10.47	17.2	0.77	57.56			
11.47		0.87	106.56			
12.47		0.87	158.76			
13.47	20.4	0.78	208.44			
14.47		0.60	250.20			
15.47		0.36	279.48			
16.47	24.4	0.08	293.24			
17.47		0.01	296.08	13.03	17.00	
18.47		0.00	296.40			
19.47	16.1	0.00	296.40			
20.47		0.00	296.40			
21.47		0.00	296.40			
22.47	16.1	0.00	296.40			
23.47		0.00	296.40			

% POSSIBLE MINUTES OF SUNSHINE 64

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 11- 5-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.513	0.001	0.139	0.140	5.86	1.29	4.57	6.41				
1.47	0.482	0.001	0.136	0.137	5.72	1.25	4.47	6.24				
2.47	0.457	0.001	0.128	0.129	5.60	1.26	4.34	6.23				
3.47	0.430	0.001	0.122	0.123	5.42	1.22	4.20	6.02				
4.47	0.410	0.001	0.119	0.120	5.33	1.18	4.15	5.84				
5.47	0.388	0.000	0.116	0.116	5.23	1.18	4.05	5.72				
6.47	0.369	0.000	0.109	0.109	5.14	1.20	3.94	5.97				0
7.47	0.351	0.001	0.108	0.109	5.10	1.20	3.90	5.54				
8.47	0.330	0.001	0.110	0.111	5.01	1.21	3.80	5.41				
9.47	0.319	0.002	0.112	0.114	4.90	1.28	3.62	5.41	0.323	0.017	0.264	
10.47	0.350	0.002	0.111	0.113	4.81	1.26	3.55	5.33				
11.47	0.418	0.002	0.107	0.109	4.68	1.30	3.39	5.30				
12.47	0.492	0.002	0.104	0.106	4.59	1.26	3.33	5.20				
13.47	0.547	0.002	0.096	0.098	4.47	1.26	3.21	5.02				
14.47	0.567	0.002	0.090	0.092	4.36	1.23	3.13	4.99	0.478	0.020	0.151	
15.47	0.556	0.002	0.084	0.087	4.26	1.21	3.05	5.00				
16.47	0.533	0.002	0.075	0.077	4.20	1.24	2.96	4.99				
17.47	0.503	0.002	0.068	0.071	4.23	1.21	3.02	4.80				
18.47	0.477	0.002	0.064	0.066	4.13	1.23	2.90	4.90				
19.47	0.451	0.001	0.061	0.062	4.06	1.25	2.81	4.88				
20.47	0.429	0.001	0.059	0.060	4.07	1.25	2.82	4.84				
21.47	0.411	0.001	0.056	0.057								
22.47	0.385	0.001	0.055	0.056								
23.47	0.378	0.001	0.053	0.055								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	13.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.2	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	10.6	0.13	4.24			
8.47		0.38	19.04			
9.47		0.61	48.28			
10.47	20.0	0.78	89.64			
11.47		0.84	138.12			
12.47		0.84	188.52			
13.47	26.1	0.82	238.36			
14.47		0.58	280.84			
15.47		0.33	308.64			
16.47	25.6	0.12	322.56			
17.47		0.01	326.68	13.03		17.00
18.47		0.00	327.00			
19.47	17.2	0.00	327.00			
20.47		0.00	327.00			
21.47		0.00	327.00			
22.47	14.4	0.00	327.00			
23.47		0.00	327.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 11- 6-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.364	0.000	0.052	0.052								
1.47	0.347	0.000	0.050	0.050								
2.47	0.333	0.000	0.050	0.050								
3.47	0.320	0.000	0.047	0.047								
4.47	0.309	0.000	0.046	0.046								
5.47	0.295	0.000	0.050	0.050								130
6.47	0.286	0.000	0.050	0.050	3.85	1.44	2.41	4.33				
7.47	0.274	0.000	0.048	0.048	3.82	1.48	2.35	4.41				
8.47	0.263	0.001	0.050	0.051	3.77	1.48	2.29	4.34				
9.47	0.253	0.002	0.055	0.057	3.82	1.48	2.34	4.69				
10.47	0.265	0.002	0.057	0.059	3.81	1.53	2.28	4.88	0.218	0.012	0.110	
11.47	0.299	0.002	0.058	0.060	3.64	1.51	2.13	4.44				
12.47	0.341	0.002	0.057	0.059	3.55	1.52	2.03	4.28				
13.47	0.374	0.002	0.056	0.058	3.52	1.53	1.99	4.26				
14.47	0.385	0.002	0.055	0.057	3.47	1.52	1.94	4.21	0.279	0.017	0.083	
15.47	0.372	0.002	0.052	0.055	3.46	1.48	1.97	4.15				
16.47	0.355	0.002	0.049	0.051	3.42	1.50	1.92	4.20				
17.47	0.338	0.001	0.046	0.047	3.39	1.48	1.90	4.14				
18.47	0.321	0.001	0.044	0.045	3.34	1.47	1.87	4.07				
19.47	0.304	0.001	0.041	0.042	3.34	1.48	1.86	4.04				
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	12.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.2	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	11.1	0.11	3.68			
8.47		0.35	17.00			
9.47		0.57	44.16			
10.47	21.7	0.75	83.40			
11.47		0.84	130.92			
12.47		0.84	181.32			
13.47	26.1	0.73	228.64			
14.47		0.57	262.36			
15.47		0.14	278.12			
16.47	23.5	0.07	284.56			
17.47		0.01	287.08			
18.47		0.00	287.40			
19.47	18.3	0.00	287.40			
20.47		0.00	287.40			
21.47		0.00	287.40			
22.47	17.2	0.00	287.40			
23.47		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 67

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 11- 4-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.000	0.000	0.000	1.83	1.56	0.27	0.67				
3.63	0.000	0.000	0.000	0.000	1.82	1.55	0.27	10.43				
4.63	0.000	0.201	0.050	0.251	3.00	1.56	1.44	10.18				
5.63	0.000	0.200	0.049	0.249	4.79	1.49	3.30	10.11				
6.63	0.000	0.198	0.050	0.248	5.33	1.55	3.78	10.32				0
7.63	0.000	0.188	0.058	0.246	5.31	1.55	3.76	10.04				
8.63	0.000	0.141	0.104	0.245	5.29	1.57	3.72	10.03				
9.63	0.019	0.050	0.185	0.235	5.17	1.68	3.50	10.18	0.157	0.175	0.073	
10.63	0.264	0.004	0.193	0.197	4.96	1.65	3.32	10.01				
11.63	0.460	0.002	0.160	0.163	4.88	1.72	3.16	10.51				
12.63	0.628	0.002	0.133	0.135	4.69	1.74	2.95	10.25				
13.63	0.695	0.002	0.118	0.120	4.64	1.72	2.92	10.15				
14.63	0.705	0.001	0.108	0.109	4.57	1.64	2.93	10.11	0.611	0.018	0.127	0
15.63	0.682	0.001	0.099	0.101	4.54	1.66	2.87	10.11				
16.63	0.647	0.001	0.090	0.091	4.57	1.53	3.03	9.89				
17.63	0.595	0.001	0.082	0.083	4.41	1.56	2.85	9.60				
18.63	0.554	0.001	0.077	0.078	4.32	1.56	2.76	9.25				
19.63	0.519	0.001	0.074	0.075	4.23	1.59	2.64	8.90				
20.63	0.499	0.001	0.067	0.068	4.20	1.60	2.60	8.86				
21.63	0.460	0.001	0.066	0.067	4.29	1.56	2.73	8.30				
22.63	0.434	0.001	0.064	0.065	3.99	1.49	2.50	8.00				0
23.63	0.407	0.000	0.061	0.061	3.90	1.47	2.43	7.66				

% POSSIBLE MINUTES OF SUNSHINE 64

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	11.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	13.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	14.4	0.07	2.66			
8.63		0.13	9.14			
9.63		0.40	27.20			
10.63	17.2	0.77	65.20			
11.63		0.87	115.20			
12.63		0.87	167.46			
13.63	24.4	0.78	216.24			
14.63		0.60	250.20			
15.63		0.36	283.08			
16.63	24.4	0.08	294.04			
17.63		0.01	296.18	9.91	17.00	
18.63		0.00	296.40			
19.63	16.1	0.00	296.40			
20.63		0.00	296.40			
21.63		0.00	296.40			
22.63	16.1	0.00	296.40			
23.63		0.00	296.40			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 11- 5-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.384	0.000	0.057	0.057	3.80	1.44	2.36	7.27				
1.63	0.363	0.000	0.052	0.052	3.71	1.40	2.31	7.10				
2.63	0.342	0.000	0.051	0.051	3.62	1.46	2.16	7.11				
3.63	0.323	0.000	0.049	0.049	3.54	1.40	2.14	6.81				
4.63	0.307	0.000	0.046	0.046	3.48	1.35	2.13	6.54				
5.63	0.279	0.000	0.045	0.045	3.34	1.31	2.03	6.11				
6.63	0.274	0.000	0.042	0.042	3.39	1.51	2.08	6.32				
7.63	0.257	0.000	0.041	0.041	3.23	1.30	1.93	5.99				130
8.63	0.238	0.000	0.043	0.043	3.18	1.30	1.88	5.83				
9.63	0.227	0.001	0.043	0.044	3.08	1.31	1.77	5.70	0.220	0.012	0.080	
10.63	0.237	0.001	0.043	0.044	3.01	1.34	1.67	5.85				
11.63	0.268	0.001	0.041	0.042	2.92	1.32	1.60	5.43				
12.63	0.305	0.001	0.040	0.041	2.84	1.26	1.58	5.26				
13.63	0.330	0.001	0.039	0.040	2.80	1.25	1.55	4.95				
14.63	0.339	0.001	0.036	0.037	2.72	1.23	1.49	4.87	0.274	0.014	0.041	
15.63	0.328	0.001	0.033	0.034	2.67	1.19	1.48	4.65				
16.63	0.307	0.001	0.030	0.031	2.57	1.20	1.37	4.58				
17.63	0.289	0.001	0.027	0.028	2.56	1.20	1.36	4.56				
18.63	0.276	0.001	0.025	0.026	2.56	1.18	1.38	4.45				
19.63	0.266	0.001	0.025	0.026	2.57	1.20	1.37	4.47				
20.63	0.257	0.001	0.022	0.024	2.53	1.16	1.36	4.38				
21.63	0.247	0.000	0.021	0.021								
22.63	0.238	0.000	0.021	0.021								
23.63	0.232	0.000	0.021	0.021								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	13.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.2	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	10.6	0.13	5.54			
8.63		0.38	22.84			
9.63		0.61	54.38			
10.63	20.0	0.78	97.44			
11.63		0.84	146.52			
12.63		0.84	196.92			
13.63	26.1	0.82	246.56			
14.63		0.58	286.64			
15.63		0.33	311.94			
16.63	25.6	0.12	323.76			
17.63		0.01	326.78	9.34		17.00
18.63		0.00	327.00			
19.63	17.2	0.00	327.00			
20.63		0.00	327.00			
21.63		0.00	327.00			
22.63	14.4	0.00	327.00			
23.63		0.00	327.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 11- 6-75

URBAN MIX 59% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.225	0.000	0.020	0.020								
1.63	0.217	0.000	0.019	0.019								
2.63	0.212	0.000	0.019	0.019								
3.63	0.204	0.000	0.019	0.019								
4.63	0.199	0.000	0.018	0.018								
5.63	0.193	0.000	0.022	0.022								
6.63	0.189	0.000	0.022	0.022	2.57	1.40	1.17	4.31				
7.63	0.182	0.000	0.022	0.022	2.57	1.42	1.15	4.37				160
8.63	0.172	0.001	0.025	0.026	2.52	1.35	1.16	4.11				
9.63	0.168	0.001	0.028	0.029	2.57	1.40	1.17	4.42				
10.63	0.175	0.001	0.029	0.030	2.57	1.45	1.12	4.77	0.155	0.011	0.039	
11.63	0.201	0.001	0.029	0.030	2.50	1.47	1.02	4.51				
12.63	0.228	0.002	0.031	0.033	2.48	1.47	1.01	4.50				
13.63	0.252	0.001	0.032	0.033	2.44	1.40	1.04	4.59				
14.63	0.263	0.001	0.031	0.032	2.47	1.42	1.05	4.34	0.222	0.013	0.022	
15.63	0.257	0.001	0.029	0.030	2.42	1.45	0.97	4.40				
16.63	0.248	0.001	0.029	0.030	2.48	1.43	1.05	4.31				
17.63	0.237	0.001	0.027	0.028	2.46	1.43	1.03	4.29				
18.63	0.229	0.001	0.026	0.027	2.46	1.41	1.05	4.32				
19.63	0.221	0.001	0.024	0.025	2.43	1.40	1.03	4.27				
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	12.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.2	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	11.1	0.11	4.78			
8.63		0.35	20.50			
9.63		0.57	49.86			
10.63	21.7	0.75	90.90			
11.63		0.84	139.52			
12.63		0.84	189.72			
13.63	26.1	0.73	235.94			
14.63		0.37	266.06			
15.63		0.14	279.52			
16.63	23.3	0.07	285.26			
17.63		0.01	287.18			
18.63		0.00	287.40			
19.63	18.3	0.00	287.40			
20.63		0.00	287.40			
21.63		0.00	287.40			
22.63	17.2	0.00	287.40			
23.63		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 67

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 11- 4-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.000	0.000	0.000	0.000								
1.80	0.000	0.000	0.000	0.000								
2.80	0.000	0.000	0.000	0.000	1.80	1.52	0.29	0.67				
3.80	0.000	0.020	0.103	0.123	1.82	1.51	0.31	10.39				
4.80	0.000	0.613	0.141	0.754	2.40	1.44	0.95	9.68				
5.80	0.000	0.599	0.149	0.748	6.05	1.47	4.58	9.81				
6.80	0.000	0.587	0.156	0.743	6.85	1.49	5.35	10.08				0
7.80	0.000	0.567	0.171	0.738	6.77	1.50	5.27	9.93				
8.80	0.000	0.512	0.215	0.727	6.70	1.55	5.15	9.94				
9.80	0.000	0.389	0.322	0.711	6.57	1.60	4.97	9.80	0.064	*	0.101	
10.80	0.024	0.107	0.551	0.658	6.27	1.58	4.69	9.27				
11.80	0.160	0.017	0.566	0.583	6.04	1.65	4.39	9.73				
12.80	0.341	0.005	0.503	0.508	5.77	1.65	4.11	9.40				
13.80	0.501	0.003	0.415	0.418	5.61	1.63	3.98	9.14				
14.80	0.600	0.003	0.327	0.330	5.40	1.57	3.83	8.92		0.213	0.228	0
15.80	0.610	0.002	0.243	0.245	5.25	1.57	3.67	8.79				
16.80	0.533	0.002	0.153	0.155	5.21	1.47	3.74	8.49				
17.80	0.472	0.001	0.118	0.119	5.20	1.45	3.74	8.15				
18.80	0.435	0.001	0.109	0.110	4.90	1.50	3.40	7.96				
19.80	0.407	0.001	0.104	0.105	4.81	1.49	3.32	7.66				
20.80	0.379	0.001	0.097	0.098	4.76	1.50	3.26	7.62				
21.80	0.358	0.001	0.094	0.095	4.65	1.48	3.16	7.34				0
22.80	0.337	0.000	0.089	0.089	4.53	1.41	3.11	7.05				
23.80	0.317	0.000	0.083	0.083	4.43	1.40	3.03	6.78				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	11.7	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	13.3	0.00	0.00			
5.80		0.00	0.00			
6.80		0.00	0.00			
7.80	14.4	0.07	5.56			
8.80		0.13	10.44			
9.80		0.40	31.20			
10.80	17.2	0.77	72.96			
11.80		0.87	125.96			
12.80		0.87	178.16			
13.80	24.4	0.78	224.04			
14.80		0.60	260.20			
15.80		0.36	286.68			
16.80	24.4	0.08	294.84			
17.80		0.01	296.28	9.34	17.00	
18.80		0.00	296.40			
19.80	16.1	0.00	296.40			
20.80		0.00	296.40			
21.80		0.00	296.40			
22.80	16.1	0.00	296.40			
23.80		0.00	296.40			

% POSSIBLE MINUTES OF SUNSHINE 64

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 11- 5-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.297	0.000	0.080	0.080	4.52	1.34	2.98	6.51				
1.80	0.280	0.000	0.076	0.076	4.22	1.30	2.92	6.27				
2.80	0.264	0.000	0.074	0.074	4.13	1.34	2.79	6.43				
3.80	0.248	0.000	0.068	0.068	4.02	1.27	2.75	6.16				
4.80	0.235	0.000	0.065	0.065	3.91	1.23	2.68	5.95				
5.80	0.222	0.000	0.064	0.064	3.72	1.12	2.60	5.28				
6.80	0.211	0.000	0.062	0.062	3.77	1.16	2.61	5.73				
7.80	0.198	0.000	0.061	0.061	3.65	1.13	2.52	5.65				170
8.80	0.189	0.001	0.064	0.065	3.54	1.14	2.40	5.49				
9.80	0.197	0.001	0.063	0.064	3.44	1.13	2.31	5.43		0.030	0.016	
10.80	0.236	0.001	0.062	0.063	3.56	1.10	2.26	5.33				
11.80	0.299	0.001	0.058	0.059	3.19	1.08	2.11	5.30				
12.80	0.347	0.001	0.055	0.056	3.02	1.01	2.01	4.94				
13.80	0.381	0.001	0.052	0.053	2.90	1.00	1.90	4.79				
14.80	0.386	0.001	0.048	0.049	2.81	0.95	1.86	4.54	0.312	0.018	0.097	
15.80	0.374	0.001	0.044	0.045	2.76	0.93	1.83	4.32				
16.80	0.351	0.001	0.037	0.039	2.60	0.89	1.71	4.20				
17.80	0.332	0.001	0.036	0.037	2.60	0.88	1.72	4.23				
18.80	0.318	0.001	0.034	0.035	2.60	0.89	1.71	4.14				
19.80	0.305	0.001	0.033	0.034	2.61	0.92	1.69	4.08				
20.80	0.292	0.001	0.032	0.033	2.57	0.86	1.71	3.82				
21.80	0.280	0.001	0.031	0.032								
22.80	0.268	0.000	0.030	0.030								
23.80	0.259	0.000	0.029	0.029								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	15.9	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	12.2	0.00	0.00			
5.80		0.00	0.00			
6.80		0.01	0.48			
7.80	10.6	0.13	6.84			
8.80		0.38	26.64			
9.80		0.61	60.48			
10.80	20.0	0.78	105.24			
11.80		0.84	154.92			
12.80		0.84	205.32			
13.80	26.1	0.82	254.76			
14.80		0.58	292.44			
15.80		0.33	315.24			
16.80	25.6	0.12	324.96			
17.80		0.01	326.88	9.54		17.00
18.80		0.00	327.00			
19.80	17.2	0.00	327.00			
20.80		0.00	327.00			
21.80		0.00	327.00			
22.80	14.4	0.00	327.00			
23.80		0.00	327.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 11- 6-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.80	0.248	0.000	0.029	0.029								
1.80	0.237	0.000	0.028	0.028								
2.80	0.229	0.000	0.026	0.026								
3.80	0.221	0.000	0.026	0.026								
4.80	0.212	0.000	0.025	0.025								
5.80	0.204	0.000	0.030	0.030								
6.80	0.199	0.000	0.029	0.029	2.60	1.20	1.41	3.85				
7.80	0.190	0.000	0.030	0.030	2.61	1.22	1.39	3.92				190
8.80	0.182	0.000	0.033	0.033	2.47	1.13	1.34	3.33				
9.80	0.183	0.001	0.034	0.035	2.51	1.12	1.39	3.51	0.164	0.010	0.097	
10.80	0.201	0.001	0.034	0.035	2.57	1.27	1.31	4.14				
11.80	0.233	0.001	0.036	0.037	2.52	1.31	1.22	4.06				
12.80	0.264	0.001	0.035	0.036	2.43	1.27	1.16	3.84				
13.80	0.284	0.001	0.035	0.036	2.40	1.26	1.14	3.67	0.225	0.014	0.054	
14.80	0.288	0.001	0.034	0.035	2.40	1.23	1.17	3.50				
15.80	0.275	0.001	0.032	0.033	2.34	1.26	1.09	3.53				
16.80	0.264	0.001	0.030	0.031	2.33	1.26	1.07	3.46				
17.80	0.251	0.001	0.029	0.030	2.35	1.26	1.10	3.44				
18.80	0.243	0.001	0.028	0.029	2.38	1.24	1.14	3.41				
19.80	0.232	0.001	0.027	0.028	10.00	1.23	8.77	3.30				
20.80												
21.80												
22.80												
23.80												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.80		0.00	0.00			
1.80	12.8	0.00	0.00			
2.80		0.00	0.00			
3.80		0.00	0.00			
4.80	12.2	0.00	0.00			
5.80		0.00	0.00			
6.80		0.01	0.48			
7.80	11.1	0.11	5.88			
8.80		0.35	24.00			
9.80		0.57	55.56			
10.80	21.7	0.75	98.40			
11.80		0.84	147.72			
12.80		0.84	198.12			
13.80	26.1	0.75	243.24			
14.80		0.37	269.76			
15.80		0.14	280.92			
16.80	23.3	0.07	285.96			
17.80		0.01	287.28			
18.80		0.00	287.40			
19.80	18.3	0.00	287.40			
20.80		0.00	287.40			
21.80		0.00	287.40			
22.80	17.2	0.00	287.40			
23.80		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 67

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 11- 4-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.000	0.000	0.000	0.000								
1.97	0.000	0.000	0.000	0.000								
2.97	0.000	0.000	0.000	0.000	1.75	1.48	0.27	0.62				
3.97	0.000	0.003	0.020	0.024	1.78	1.44	0.34	10.31				
4.97	0.000	0.093	0.019	0.112	1.80	1.41	0.39	9.77				
5.97	0.000	0.093	0.018	0.111	2.39	1.41	0.97	9.94				
6.97	0.000	0.091	0.018	0.109	2.56	1.48	1.09	10.46				
7.97	0.000	0.089	0.019	0.108	2.52	1.48	1.05	10.22				0
8.97	0.000	0.078	0.029	0.107	2.48	1.53	0.95	10.32				
9.97	0.007	0.053	0.050	0.104	2.44	1.60	0.84	10.24	0.021	0.048	0.007	
10.97	0.046	0.024	0.076	0.099	2.32	1.50	0.82	9.41				
11.97	0.105	0.013	0.078	0.091	2.37	1.63	0.75	10.04				
12.97	0.163	0.011	0.072	0.082	2.33	1.63	0.71	9.88				
13.97	0.206	0.010	0.064	0.074	2.35	1.58	0.77	9.54				
14.97	0.237	0.010	0.055	0.064	2.32	1.51	0.81	9.34	0.212	0.058	0.044	0
15.97	0.242	0.007	0.047	0.055	2.31	1.55	0.76	9.23				
16.97	0.221	0.003	0.034	0.037	2.36	1.44	0.91	8.95				
17.97	0.195	0.001	0.024	0.025	2.37	1.45	0.92	8.67				
18.97	0.179	0.000	0.019	0.019	2.36	1.48	0.88	8.47				
19.97	0.165	0.000	0.015	0.015	2.32	1.48	0.84	8.06				
20.97	0.156	0.000	0.013	0.013	2.36	1.50	0.86	8.07				
21.97	0.150	0.000	0.012	0.012	2.32	1.50	0.82	7.76				
22.97	0.140	0.000	0.011	0.011	2.31	1.47	0.85	7.61				0
23.97	0.134	0.000	0.011	0.011	2.30	1.44	0.86	7.31				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	11.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	13.3	0.00	0.00			
5.97		0.00	0.00			
6.97		0.00	0.00			
7.97	14.4	0.07	4.06			
8.97		0.13	11.74			
9.97		0.40	35.20			
10.97	17.2	0.77	80.66			
11.97		0.87	132.66			
12.97		0.87	184.86			
13.97	24.4	0.78	231.84			
14.97		0.60	268.20			
15.97		0.36	290.28			
16.97	24.4	0.08	295.04			
17.97		0.01	296.38	9.34	17.00	
18.97		0.00	296.40			
19.97	16.1	0.00	296.40			
20.97		0.00	296.40			
21.97		0.00	296.40			
22.97	16.1	0.00	296.40			
23.97		0.00	296.40			

% POSSIBLE MINUTES OF SUNSHINE 64

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

CHAMBER NUMBER 4
DAY 2 OF 3 11- 5-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.127	0.000	0.010	0.010	2.28	1.44	0.84	7.03				
1.97	0.120	0.000	0.010	0.010	2.23	1.40	0.82	6.85				
2.97	0.112	0.000	0.009	0.009	2.22	1.41	0.81	6.89				
3.97	0.108	0.000	0.009	0.009	2.21	1.41	0.80	6.71				
4.97	0.105	0.000	0.009	0.009	2.20	1.36	0.84	6.48				
5.97	0.097	0.000	0.007	0.007	2.08	1.28	0.80	5.81				
6.97	0.094	0.000	0.007	0.007	2.20	1.36	0.84	6.23				150
7.97	0.088	0.000	0.009	0.009	2.14	1.36	0.78	6.06				
8.97	0.084	0.002	0.009	0.011	2.11	1.41	0.70	5.84				
9.97	0.086	0.003	0.010	0.013	2.07	1.43	0.64	5.89	0.065	0.011	0.028	
10.97	0.096	0.007	0.011	0.018	2.09	1.41	0.68	5.69				
11.97	0.111	0.010	0.011	0.020	2.05	1.41	0.64	5.62				
12.97	0.138	0.010	0.012	0.021	1.99	1.39	0.60	5.43				
13.97	0.150	0.010	0.012	0.021	1.95	1.37	0.58	5.16				
14.97	0.157	0.010	0.012	0.021	1.92	1.35	0.57	4.90	0.113	0.016	0.028	
15.97	0.152	0.007	0.011	0.018	1.98	1.36	0.62	4.59				
16.97	0.140	0.004	0.009	0.013	1.90	1.31	0.59	4.36				
17.97	0.129	0.002	0.010	0.012	1.95	1.34	0.61	4.46				
18.97	0.121	0.001	0.009	0.010	1.96	1.35	0.61	4.47				
19.97	0.116	0.001	0.007	0.009	1.97	1.32	0.65	4.27				
20.97	0.109	0.001	0.007	0.009	1.95	1.28	0.67	4.06				
21.97	0.106	0.000	0.006	0.006								
22.97	0.101	0.000	0.005	0.005								
23.97	0.097	0.000	0.004	0.004								

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	13.9	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	12.2	0.00	0.00			
5.97		0.00	0.00			
6.97		0.01	0.58			
7.97	10.6	0.13	8.14			
8.97		0.38	30.44			
9.97		0.61	66.58			
10.97	20.0	0.78	113.04			
11.97		0.84	163.52			
12.97		0.84	213.72			
13.97	26.1	0.82	262.96			
14.97		0.58	298.24			
15.97		0.33	318.54			
16.97	25.6	0.12	326.16			
17.97		0.01	326.98	9.34		17.00
18.97		0.00	327.00			
19.97	17.2	0.00	327.00			
20.97		0.00	327.00			
21.97		0.00	327.00			
22.97	14.4	0.00	327.00			
23.97		0.00	327.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 5 OF 5 11- 6-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.095	0.000	0.004	0.004								
1.97	0.092	0.000	0.004	0.004								
2.97	0.088	0.000	0.004	0.004								
3.97	0.086	0.000	0.004	0.004								
4.97	0.083	0.000	0.003	0.003								
5.97	0.079	0.000	0.010	0.010								
6.97	0.077	0.000	0.010	0.010	2.09	1.60	0.49	4.32				130
7.97	0.075	0.000	0.011	0.011	2.09	1.60	0.49	4.33				
8.97	0.073	0.002	0.011	0.013	1.90	1.41	0.49	3.75				
9.97	0.075	0.003	0.012	0.015	1.88	1.44	0.44	3.87	0.052	0.007	0.057	
10.97	0.086	0.007	0.013	0.020	2.03	1.52	0.51	4.52				
11.97	0.104	0.009	0.014	0.022	2.02	1.63	0.39	4.41				
12.97	0.123	0.009	0.014	0.022	1.99	1.57	0.41	4.29				
13.97	0.137	0.009	0.014	0.022	1.95	1.54	0.41	4.11	0.094	0.012	0.028	
14.97	0.140	0.007	0.014	0.021	1.93	1.57	0.36	4.18				
15.97	0.135	0.004	0.014	0.018	1.92	1.55	0.37	4.06				
16.97	0.127	0.003	0.013	0.016	1.91	1.56	0.35	4.00				
17.97	0.119	0.002	0.013	0.015	1.96	1.57	0.39	4.06				
18.97	0.110	0.001	0.013	0.014	2.02	1.56	0.45	3.99				
19.97	0.107	0.001	0.012	0.013	2.01	1.54	0.47	4.05				
20.97												
21.97												
22.97												
23.97												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	12.8	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	12.2	0.00	0.00			
5.97		0.00	0.00			
6.97		0.01	0.58			
7.97	11.1	0.11	6.98			
8.97		0.35	27.50			
9.97		0.57	61.26			
10.97	21.7	0.75	105.90			
11.97		0.84	156.12			
12.97		0.84	206.52			
13.97	26.1	0.73	250.54			
14.97		0.37	273.46			
15.97		0.14	282.52			
16.97	23.3	0.07	286.66			
17.97		0.01	287.38			
18.97		0.00	287.40			
19.97	18.3	0.00	287.40			
20.97		0.00	287.40			
21.97		0.00	287.40			
22.97	17.2	0.00	287.40			
23.97		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 67

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 11-18-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000	1.11	0.71	0.40	0.33				
1.13	0.000	0.000	0.000	0.000	1.02	0.66	0.36	0.20				
2.13	0.000	0.000	0.000	0.000	0.98	0.62	0.36	0.20				
3.13	0.000	0.000	0.000	0.000	0.93	0.56	0.37	0.17				
4.13	0.000	0.197	0.049	0.246	5.47	0.54	4.93	9.62				
5.13	0.000	0.196	0.050	0.246	6.05	0.54	5.51	9.53				
6.13	0.000	0.195	0.049	0.244	5.96	0.60	5.36	9.33				0
7.13	0.000	0.191	0.050	0.242	6.06	0.54	5.52	9.62				
8.13	0.000	0.165	0.072	0.236	6.05	0.53	5.52	9.62				
9.13	0.025	0.027	0.184	0.211	5.84	0.54	5.29	9.62				
10.13	0.213	0.000	0.166	0.166	5.58	0.56	5.02	9.62	0.235	0.135	0.096	
11.13	0.336	0.000	0.134	0.134	5.38	0.55	4.83	9.53				
12.13	0.456	0.000	0.108	0.108	5.18	0.56	4.63	9.51				
13.13	0.491	0.000	0.099	0.099	5.01	0.53	4.48	9.53				
14.13	0.481	0.000	0.096	0.096					0.461	0.016	0.191	
15.13	0.457	0.000	0.091	0.091	4.92	0.54	4.38	9.24				0
16.13	0.418	0.000	0.083	0.083	4.86	0.54	4.32	9.15				
17.13	0.383	0.000	0.077	0.077	4.69	0.53	4.17	*				
18.13	0.352	0.000	0.075	0.075								
19.13	0.333	0.000	0.073	0.073	4.66	0.63	4.03	8.86				
20.13	0.319	0.000	0.072	0.072	4.63	0.61	4.02	8.80				
21.13	0.306	0.000	0.070	0.070	4.59	0.62	3.97	8.77				
22.13	0.296	0.000	0.068	0.068	4.50	0.60	3.90	8.38				0
23.13	0.288	0.000	0.067	0.067	4.62	0.63	3.99	8.81				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	4.4	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	3.3	0.11	0.88			
8.13		0.32	9.16			
9.13		0.55	30.20			
10.13	13.9	0.73	64.64			
11.13		0.82	109.16			
12.13		0.81	158.28			
13.13	21.1	0.72	206.16			
14.13		0.56	248.08			
15.13		0.33	279.84			
16.13	22.2	0.10	297.80			
17.13		0.00	303.00			
18.13		0.00	303.00			
19.13	11.1	0.00	303.00			
20.13		0.00	303.00			
21.13		0.00	303.00			
22.13	7.8	0.00	303.00			
23.13		0.00	303.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 11-19-75

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.279	0.000	0.067	0.067	4.58	0.62	3.96	8.76				
1.13	0.271	0.000	0.066	0.066	4.58	0.63	3.95	8.73				
2.13	0.264	0.000	0.066	0.066	4.57	0.58	3.99	8.74				
3.13	0.258	0.000	0.066	0.066	4.57	0.63	3.94	8.74				
4.13	0.250	0.000	0.065	0.065	4.57	0.62	3.95	8.68				
5.13	0.243	0.000	0.065	0.065	4.65	0.63	4.01	8.83				
6.13	0.236	0.000	0.065	0.065	4.59	0.65	3.93	9.04				0
7.13	0.231	0.000	0.064	0.064	4.60	0.64	3.95	9.03				
8.13	0.221	0.000	0.064	0.064	4.60	0.67	3.93	9.17				
9.13	0.213	0.000	0.066	0.066	4.43	0.62	3.81	*				
10.13	0.206	0.000	0.067	0.067	4.59	0.70	3.89	9.12	0.227	0.011	0.127	
11.13	0.214	0.000	0.068	0.068	4.53	0.68	3.85	9.08				
12.13	0.233	0.000	0.070	0.070	4.46	0.67	3.79	9.03				
13.13	0.266	0.000	0.070	0.070	4.39	0.67	3.72	8.93				
14.13	0.286	0.000	0.068	0.068	4.18	0.58	3.60	*				
15.13	0.288	0.000	0.066	0.066	4.36	0.66	3.71	8.80				
16.13	0.274	0.000	0.061	0.061	4.28	0.66	3.62	8.67				
17.13	0.256	0.000	0.057	0.057	4.29	0.69	3.61	8.65				
18.13	0.235	0.000	0.055	0.055								
19.13	0.225	0.000	0.053	0.053	4.23	0.73	3.51	8.59				
20.13	0.215	0.000	0.052	0.052	4.23	0.72	3.51	8.50				
21.13	0.207	0.000	0.051	0.051	4.22	0.69	3.53	8.39				
22.13	0.203	0.000	0.049	0.049	4.12	0.67	3.45	8.11				
23.13	0.198	0.000	0.048	0.048	4.22	0.71	3.51	8.57				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	7.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	2.8	0.10	0.80			
8.13		0.30	8.40			
9.13		0.52	28.16			
10.13	13.9	0.71	60.88			
11.13		0.70	103.40			
12.13		0.80	146.20			
13.13	21.1	0.72	193.56			
14.13		0.54	235.32			
15.13		0.31	265.88			
16.13	20.6	0.09	282.72			
17.13		0.00	287.40			
18.13		0.00	287.40			
19.13	13.3	0.00	287.40			
20.13		0.00	287.40			
21.13		0.00	287.40			
22.13	11.1	0.00	287.40			
23.13		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 95

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

*Data suspect and discarded.

CHAMBER NUMBER 1 URBAN MIX 0% DILUTION
DAY 3 OF 5 11-20-75 TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.193	0.000	0.048	0.048	4.22	0.75	3.47	8.72				
1.13	0.189	0.000	0.047	0.047	4.20	0.74	3.47	8.81				
2.13	0.184	0.000	0.046	0.046	4.26	0.77	3.48	8.99				
3.13	0.181	0.000	0.046	0.046	4.25	0.75	3.50	9.33				
4.13	0.174	0.000	0.046	0.046	4.12	0.80	3.32	8.10*				
5.13	0.171	0.000	0.045	0.045	4.10	0.80	3.31	7.97				
6.13	0.168	0.000	0.045	0.045	4.10	0.81	3.29	7.96				0
7.13	0.165	0.000	0.045	0.045	3.86	0.66	3.20	**				
8.13	0.160	0.000	0.044	0.044	3.89	0.67	3.22	**				
9.13	0.153	0.000	0.046	0.046	4.10	0.82	3.28	7.89				
10.13	0.152	0.000	0.047	0.047	4.07	0.80	3.27	7.86	0.167	0.007	0.075	
11.13	0.163	0.000	0.049	0.049	4.08	0.78	3.29	7.82				
12.13	0.188	0.000	0.050	0.050	3.97	0.78	3.19	7.72				
13.13	0.212	0.000	0.052	0.052								
14.13	0.227	0.000	0.051	0.051	3.87	0.83	3.03	7.60				
15.13	0.229	0.000	0.050	0.050	3.83	0.82	3.00	7.54				
16.13	0.220	0.000	0.046	0.046	3.65	0.73	2.92	6.77				
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	7.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	5.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	3.3	0.10	0.80			
8.13		0.30	8.40			
9.13		0.52	28.16			
10.13	15.0	0.69	60.72			
11.13		0.78	102.84			
12.13		0.78	149.64			
13.13	20.6	0.70	195.80			
14.13		0.53	236.44			
15.13		0.22	265.76			
16.13	19.4	0.01	277.28			
17.13		0.00	277.80			
18.13		0.00	277.80			
19.13	13.9	0.00	277.80			
20.13		0.00	277.80			
21.13		0.00	277.80			
22.13	14.4	0.00	277.80			
23.13		0.00	277.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 21.1 CENT

*Data shift due to calibration adjust.

**Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 11-18-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.000	0.000	1.34	0.97	0.37	0.32				
1.30	0.000	0.000	0.000	0.000	1.32	0.97	0.35	0.25				
2.30	0.000	0.000	0.000	0.000	1.30	0.92	0.37	0.20				
3.30	0.000	0.000	0.048	0.048	1.31	0.95	0.36	9.53				
4.30	0.000	0.194	0.047	0.241	5.27	0.92	4.35	9.53				
5.30	0.000	0.191	0.047	0.238	5.69	0.93	4.77	9.53				
6.30	0.000	0.190	0.047	0.237	5.98	0.82	5.16	*				
7.30	0.000	0.186	0.049	0.235	5.93	0.92	5.01	9.53				0
8.30	0.000	0.153	0.077	0.230	5.88	0.89	4.99	9.53				
9.30	0.040	0.021	0.179	0.200	5.58	0.91	4.67	9.43				
10.30	0.182	0.000	0.150	0.150	4.99	0.94	4.05	8.75	0.193	0.124	0.050	
11.30	0.276	0.000	0.112	0.112	4.51	0.92	3.59	7.92				
12.30	0.373	0.000	0.088	0.088	4.06	0.88	3.18	7.18				
13.30	0.387	0.000	0.074	0.074	3.67	0.82	2.85	6.50				
14.30	0.358	0.000	0.064	0.064	3.39	0.75	2.63	5.67	0.341	0.011	0.091	
15.30	0.317	0.000	0.057	0.057	3.06	0.70	2.36	5.11				
16.30	0.268	0.000	0.047	0.047	2.82	0.65	2.17	4.58				0
17.30	0.224	0.000	0.040	0.040	2.44	0.53	1.91	3.59				
18.30	0.187	0.000	0.036	0.036	2.44	0.61	1.83	3.85				
19.30	0.161	0.000	0.032	0.032	2.19	0.56	1.63	3.44				
20.30	0.140	0.000	0.028	0.028	2.01	0.51	1.51	3.04				
21.30	0.123	0.000	0.025	0.025	1.84	0.48	1.37	2.66				
22.30	0.108	0.000	0.021	0.021	1.63	0.35	1.27	2.09				
23.30	0.096	0.000	0.020	0.020	1.64	0.41	1.23	2.35				0

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	4.4	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	3.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	3.3	0.11	1.98			
8.30		0.32	12.36			
9.30		0.55	35.70	30.02	9.00	
10.30	13.9	0.73	71.94			
11.30		0.82	117.36			
12.30		0.81	166.38			
13.30	21.1	0.72	213.36			
14.30		0.56	253.68			
15.30		0.33	283.14			
16.30	22.2	0.10	298.80			
17.30		0.00	303.00			
18.30		0.00	303.00			
19.30	11.1	0.00	303.00			
20.30		0.00	303.00			
21.30		0.00	303.00			
22.30	7.8	0.00	303.00			
23.30		0.00	303.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 11-19-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.083	0.000	0.018	0.018	1.54	0.36	1.18	2.15				
1.30	0.074	0.000	0.016	0.016	1.44	0.32	1.12	1.94				
2.30	0.065	0.000	0.015	0.015	1.37	0.31	1.05	1.74				
3.30	0.057	0.000	0.013	0.013	1.26	0.27	0.99	1.60				
4.30	0.050	0.000	0.013	0.013	1.22	0.25	0.97	1.44				
5.30	0.044	0.000	0.012	0.012	1.18	0.25	0.94	1.38				170
6.30	0.039	0.000	0.011	0.011	1.11	0.21	0.90	1.28				
7.30	0.032	0.000	0.011	0.011	1.06	0.21	0.84	1.21				
8.30	0.029	0.000	0.011	0.011	0.99	0.23	0.76	1.12				
9.30	0.029	0.000	0.011	0.011	0.86	0.12	0.75	0.75				
10.30	0.036	0.000	0.012	0.012	0.94	0.19	0.76	1.17	0.035	0.009	0.033	
11.30	0.050	0.000	0.014	0.014	0.96	0.14	0.82	1.11				
12.30	0.067	0.000	0.017	0.017	0.88	0.17	0.72	1.15				
13.30	0.087	0.000	0.019	0.019	0.85	0.16	0.70	1.15				
14.30	0.103	0.000	0.019	0.019	0.83	0.12	0.71	0.86	0.099	0.007	0.043	
15.30	0.107	0.000	0.018	0.018	0.94	0.16	0.78	1.19				
16.30	0.102	0.000	0.017	0.017	0.90	0.16	0.74	1.08				
17.30	0.094	0.000	0.015	0.015	0.97	0.24	0.73	1.27				
18.30	0.086	0.000	0.016	0.016	0.99	0.24	0.75	1.31				
19.30	0.081	0.000	0.015	0.015	1.00	0.27	0.73	1.30				
20.30	0.078	0.000	0.014	0.014	1.02	0.27	0.75	1.28				
21.30	0.075	0.000	0.013	0.013	0.99	0.25	0.74	1.28				
22.30	0.074	0.000	0.012	0.012	0.99	0.23	0.76	1.13				
23.30	0.072	0.000	0.012	0.012	1.07	0.27	0.79	1.24				

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	7.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	3.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	2.8	0.10	1.80			
8.30		0.30	11.40			
9.30		0.52	33.36	30.02		9.00
10.30	13.9	0.71	67.98			
11.30		0.70	110.40			
12.30		0.80	154.20			
13.30	21.1	0.72	200.76			
14.30		0.54	240.72			
15.30		0.31	268.98			
16.30	20.6	0.09	285.62			
17.30		0.00	287.40			
18.30		0.00	287.40			
19.30	15.5	0.00	287.40			
20.30		0.00	287.40			
21.30		0.00	287.40			
22.30	11.1	0.00	287.40			
23.30		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 95

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 11-20-75

URBAN MIX 77% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.070	0.000	0.011	0.011	1.06	0.28	0.78	1.19				
1.30	0.067	0.000	0.011	0.011	1.05	0.29	0.76	1.19				
2.30	0.065	0.000	0.011	0.011	1.07	0.27	0.79	1.21				
3.30	0.064	0.000	0.011	0.011	1.06	0.26	0.80	1.23				
4.30	0.063	0.000	0.011	0.011	1.06	0.35	0.71	1.24				
5.30	0.062	0.000	0.011	0.011	1.06	0.35	0.71	1.17				
6.30	0.061	0.000	0.011	0.011	1.07	0.36	0.71	1.21				0
7.30	0.059	0.000	0.011	0.011	0.98	0.33	0.65	1.14				
8.30	0.056	0.000	0.020	0.020	0.98	0.31	0.67	1.20				
9.30	0.055	0.000	0.011	0.011	1.08	0.35	0.74	1.24				
10.30	0.056	0.000	0.012	0.012	1.06	0.35	0.71	1.24	0.056	0.009	0.025	
11.30	0.065	0.000	0.014	0.014	1.06	0.37	0.70	1.26				
12.30	0.081	0.000	0.015	0.015	1.05	0.37	0.67	1.30				
13.30	0.095	0.000	0.017	0.017								
14.30	0.104	0.000	0.017	0.017	1.05	0.38	0.66	1.28				
15.30	0.106	0.000	0.017	0.017	1.05	0.39	0.65	1.30				
16.30	0.102	0.000	0.015	0.015	0.92	0.30	0.62	0.79				
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	7.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	5.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	3.3	0.10	1.80			
8.30		0.30	11.40			
9.30		0.52	33.36			
10.30	15.0	0.69	67.62			
11.30		0.78	110.64			
12.30		0.78	157.44			
13.30	20.6	0.70	202.80			
14.30		0.53	241.74			
15.30		0.22	267.96			
16.30	19.4	0.01	277.38			
17.30		0.00	277.80			
18.30		0.00	277.80			
19.30	13.9	0.00	277.80			
20.30		0.00	277.80			
21.30		0.00	277.80			
22.30	14.4	0.00	277.80			
23.30		0.00	277.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 21.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 11-18-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000	0.92	0.49	0.43	0.25				
1.47	0.000	0.000	0.000	0.000	0.87	0.47	0.41	0.20				
2.47	0.000	0.000	0.000	0.000	0.85	0.42	0.43	0.16				
3.47	0.000	0.196	0.048	0.244	0.85	0.43	0.42	9.72				
4.47	0.000	0.195	0.049	0.244	5.09	0.43	4.66	9.72				
5.47	0.000	0.193	0.049	0.242	5.20	0.43	4.77	9.72				
6.47	0.000	0.190	0.049	0.240	5.67	0.38	5.29	9.23				140
7.47	0.000	0.184	0.051	0.235	5.76	0.46	5.30	9.62				
8.47	0.000	0.126	0.099	0.226	5.68	0.43	5.25	9.62				
9.47	0.107	0.000	0.190	0.190	5.52	0.44	4.88	9.53				
10.47	0.271	0.000	0.147	0.147	5.00	0.44	4.56	9.14	0.245	0.119	0.081	
11.47	0.389	0.000	0.114	0.114	4.72	0.46	4.26	9.03				
12.47	0.478	0.000	0.097	0.097	4.44	0.46	3.99	8.76				
13.47	0.490	0.000	0.089	0.089	4.24	0.46	3.78	8.48				
14.47	0.467	0.000	0.082	0.082	4.08	0.46	3.62	7.88	0.432	0.012	0.206	
15.47	0.430	0.000	0.074	0.074	3.90	0.47	3.43	7.59				120
16.47	0.388	0.000	0.065	0.065	3.79	0.48	3.31	7.24				
17.47	0.351	0.000	0.061	0.061	3.60	0.43	3.17	6.55				
18.47	0.325	0.000	0.058	0.058	3.63	0.51	3.12	6.86				
19.47	0.306	0.000	0.056	0.056	3.48	0.49	2.98	6.67				
20.47	0.289	0.000	0.052	0.052	3.36	0.46	2.91	6.42				
21.47	0.275	0.000	0.050	0.050	3.19	0.41	2.78	5.89				
22.47	0.262	0.000	0.049	0.049	3.15	0.42	2.73	6.04				0
23.47	0.249	0.000	0.046	0.046	3.15	0.44	2.71	5.96				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	4.4	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	3.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	3.3	0.11	5.08			
8.47		0.32	15.56	9.34	8.67	
9.47		0.55	41.20			
10.47	13.9	0.73	79.24			
11.47		0.82	125.56			
12.47		0.81	174.48			
13.47	21.1	0.56	216.08			
14.47		0.72	254.16			
15.47		0.33	286.44			
16.47	22.2	0.10	299.80			
17.47		0.00	303.00			
18.47		0.00	303.00			
19.47	11.1	0.00	303.00			
20.47		0.00	303.00			
21.47		0.00	303.00			
22.47	7.8	0.00	303.00			
23.47		0.00	303.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 5 11-19-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.237	0.000	0.046	0.046	3.10	0.40	2.69	5.70				
1.47	0.228	0.000	0.044	0.044	3.01	0.41	2.60	5.64				
2.47	0.217	0.000	0.043	0.043	2.94	0.38	2.57	5.47				
3.47	0.210	0.000	0.042	0.042	2.88	0.37	2.51	5.26				
4.47	0.200	0.000	0.041	0.041	2.81	0.36	2.46	5.11				
5.47	0.189	0.000	0.040	0.040	2.80	0.36	2.44	5.16				
6.47	0.182	0.000	0.039	0.039	2.73	0.38	2.35	5.08				180
7.47	0.174	0.000	0.037	0.037	2.67	0.37	2.30	4.91				
8.47	0.165	0.000	0.039	0.039	2.60	0.35	2.25	4.73				
9.47	0.159	0.000	0.040	0.040	2.67	0.40	2.27	5.05				
10.47	0.161	0.000	0.041	0.041	2.55	0.37	2.19	4.85	0.164	0.010	0.093	
11.47	0.171	0.000	0.042	0.042	2.53	0.37	2.16	4.74				
12.47	0.195	0.000	0.043	0.043	2.45	0.36	2.09	4.75				
13.47	0.220	0.000	0.043	0.043	2.44	0.42	2.02	4.66				
14.47	0.233	0.000	0.042	0.042	2.52	0.47	2.05	4.85	0.210	0.009	0.132	
15.47	0.232	0.000	0.040	0.040	2.44	0.43	2.01	4.48				
16.47	0.218	0.000	0.035	0.035	2.41	0.47	1.94	4.44				
17.47	0.205	0.000	0.033	0.033	2.47	0.55	1.92	4.56				
18.47	0.194	0.000	0.032	0.032	2.45	0.52	1.93	4.52				
19.47	0.185	0.000	0.031	0.031	2.46	0.55	1.91	4.46				
20.47	0.179	0.000	0.029	0.029	2.46	0.54	1.92	4.39				
21.47	0.172	0.000	0.029	0.029	2.36	0.49	1.87	3.96				
22.47	0.169	0.000	0.028	0.028	2.53	0.58	1.95	4.53				
23.47	0.164	0.000	0.028	0.028	2.46	0.57	1.89	4.30				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	7.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	3.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	2.8	0.10	2.80			
8.47		0.30	14.40	9.34		8.67
9.47		0.52	38.56			
10.47	13.9	0.71	75.08			
11.47		0.70	117.40			
12.47		0.80	162.20			
13.47	21.1	0.72	207.96			
14.47		0.54	246.12			
15.47		0.31	272.08			
16.47	20.6	0.09	284.52			
17.47		0.00	287.40			
18.47		0.00	287.40			
19.47	13.3	0.00	287.40			
20.47		0.00	287.40			
21.47		0.00	287.40			
22.47	11.1	0.00	287.40			
23.47		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 95

RDU AIRPORT MAXIMUM TEMPERATURE 22.2 CENT

CHAMBER NUMBER 3
DAY 5 OF 5 11-20-75

URBAN MIX 39% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.160	0.000	0.027	0.027	2.44	0.58	1.86	4.33				
1.47	0.158	0.000	0.026	0.026	2.44	0.61	1.83	4.30				
2.47	0.153	0.000	0.025	0.025	2.45	0.60	1.85	4.39				
3.47	0.151	0.000	0.025	0.025	2.45	0.61	1.85	4.51				
4.47	0.148	0.000	0.024	0.024	2.39	0.66	1.72	3.96*				
5.47	0.143	0.000	0.024	0.024	2.39	0.71	1.68	3.97				
6.47	0.140	0.000	0.024	0.024	2.39	0.68	1.70	3.89				230
7.47	0.138	0.000	0.024	0.024	2.40	0.73	1.68	4.19				
8.47	0.135	0.000	0.024	0.024	2.41	0.73	1.68	4.22				
9.47	0.130	0.000	0.026	0.026	2.39	0.68	1.70	3.95				
10.47	0.132	0.000	0.027	0.027	2.35	0.64	1.70	3.81	0.131	0.006	0.057	
11.47	0.143	0.000	0.029	0.029	2.35	0.69	1.66	3.77				
12.47	0.160	0.000	0.029	0.029	2.31	0.71	1.60	3.62				
13.47	0.174	0.000	0.030	0.030								
14.47	0.182	0.000	0.029	0.029	2.31	0.81	1.50	3.57	0.166	0.007	0.076	
15.47	0.180	0.000	0.027	0.027	2.26	0.85	1.42	3.51				
16.47	0.172	0.000	0.025	0.025	2.12	0.73	1.39	2.94				
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	7.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	5.3	0.10	2.80			
8.47		0.30	14.40			
9.47		0.52	38.56			
10.47	15.0	0.69	74.52			
11.47		0.78	118.44			
12.47		0.78	165.24			
13.47	20.6	0.70	209.80			
14.47		0.53	241.04			
15.47		0.22	270.16			
16.47	19.4	0.01	271.48			
17.47		0.00	271.80			
18.47		0.00	271.80			
19.47	13.9	0.00	271.80			
20.47		0.00	271.80			
21.47		0.00	271.80			
22.47	14.4	0.00	271.80			
23.47		0.00	271.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 21.1 CENT

*Data shift due to calibration adjust.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 11-18-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000	1.07	0.68	0.39	0.13				
1.63	0.000	0.000	0.000	0.000	1.06	0.69	0.36	0.13				
2.63	0.000	0.000	0.000	0.000	1.04	0.68	0.36	0.12				
3.63	0.000	0.211	0.051	0.262	1.06	0.68	0.38	9.62				
4.63	0.000	0.211	0.051	0.262	3.38	0.67	2.71	9.62				190
5.63	0.000	0.209	0.052	0.261	4.14	0.68	3.46	9.62				
6.63	0.000	0.204	0.052	0.257	4.66	0.67	3.98	9.53				
7.63	0.000	0.200	0.055	0.255	4.61	0.66	3.95	9.43				
8.63	0.000	0.158	0.088	0.246	4.54	0.66	3.88	9.43				
9.63	0.017	0.040	0.182	0.221	4.35	0.66	3.69	9.43	0.062	0.134	0.061	
10.63	0.118	0.000	0.166	0.166	3.76	0.67	3.10	8.07				
11.63	0.203	0.000	0.128	0.128	3.32	0.68	2.64	7.01				
12.63	0.286	0.000	0.097	0.097	2.98	0.67	2.30	6.01				
13.63	0.322	0.000	0.072	0.072	2.72	0.70	2.02	5.32	*	0.018	0.101	190
14.63	0.306	0.000	0.056	0.056	2.52	0.71	1.81	4.32				
15.63	0.261	0.000	0.043	0.043	2.34	0.70	1.63	3.78				
16.63	0.211	0.000	0.032	0.032	2.23	0.73	1.50	3.28				
17.63	0.168	0.000	0.028	0.028	2.16	0.74	1.42	2.91				
18.63	0.137	0.000	0.022	0.022	2.10	0.78	1.31	2.56				
19.63	0.112	0.000	0.019	0.019	1.94	0.80	1.13	2.27				
20.63	0.094	0.000	0.015	0.015	1.85	0.80	1.05	2.00				
21.63	0.078	0.000	0.013	0.013	1.72	0.77	0.95	1.60				0
22.63	0.066	0.000	0.012	0.012	1.78	0.83	0.95	1.78				
23.63	0.056	0.000	0.011	0.011	1.63	0.79	0.85	1.27				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	4.4	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.5	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	5.3	0.11	4.18			
8.63		0.52	18.76			
9.63		0.55	46.70	62.58	9.50	
10.63	13.9	0.73	86.54			
11.63		0.82	155.76			
12.63		0.81	182.58			
13.63	21.1	0.72	227.76			
14.63		0.56	264.88			
15.63		0.33	289.74			
16.63	22.2	0.10	300.80			
17.63		0.00	305.00			
18.63		0.00	305.00			
19.63	11.1	0.00	305.00			
20.63		0.00	305.00			
21.63		0.00	305.00			
22.63	7.8	0.00	305.00			
23.63		0.00	305.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 72.0 CENT

*Data suspect and discarded.

CHAMBER NUMBER 4
DAY 2 OF 3 11-19-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.046	0.000	0.009	0.009	1.58	0.77	0.81	1.04				
1.63	0.040	0.000	0.007	0.007	1.53	0.76	0.77	0.87				
2.63	0.032	0.000	0.007	0.007	1.49	0.74	0.75	0.72				
3.63	0.027	0.000	0.006	0.006	1.48	0.76	0.69	0.62				
4.63	0.021	0.000	0.005	0.005	1.42	0.77	0.65	0.48				200
5.63	0.018	0.000	0.004	0.004	1.41	0.79	0.62	0.42				
6.63	0.015	0.000	0.004	0.004	1.40	0.81	0.59	0.39				
7.63	0.012	0.000	0.003	0.003	1.36	0.79	0.57	0.32				
8.63	0.011	0.000	0.004	0.004	1.31	0.77	0.54	0.30				
9.63	0.013	0.000	0.008	0.008								
10.63	0.021	0.000	0.006	0.006	1.26	0.80	0.46	0.32	*	0.010	0.023	
11.63	0.033	0.000	0.007	0.007	1.24	0.81	0.43	0.32				
12.63	0.050	0.000	0.010	0.010	1.19	0.77	0.42	0.31				
13.63	0.062	0.000	0.011	0.011	1.22	0.82	0.40	0.36				
14.63	0.071	0.000	0.011	0.011	1.34	0.84	0.50	0.43	*	0.008	0.024	
15.63	0.071	0.000	0.010	0.010	1.27	0.79	0.49	0.40				
16.63	0.067	0.000	0.007	0.007	1.32	0.83	0.49	0.46				
17.63	0.061	0.000	0.010	0.010	1.39	0.84	0.55	0.53				
18.63	0.056	0.000	0.011	0.011	1.39	0.86	0.53	0.59				
19.63	0.053	0.000	0.010	0.010	1.40	0.86	0.54	0.53				
20.63	0.050	0.000	0.009	0.009	1.40	0.86	0.54	0.48				
21.63	0.048	0.000	0.009	0.009	1.41	0.88	0.53	0.56				
22.63	0.046	0.000	0.007	0.007	1.48	0.88	0.60	0.63				
23.63	0.045	0.000	0.006	0.006	1.44	0.84	0.60	0.44				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	7.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	2.8	0.10	5.80			
8.63		0.30	17.40			
9.63		0.52	43.76	62.58		9.50
10.63	13.9	0.71	82.18			
11.63		0.70	124.40			
12.63		0.80	170.20			
13.63	21.1	0.72	215.16			
14.63		0.54	251.52			
15.63		0.31	275.18			
16.63	20.6	0.09	285.42			
17.63		0.00	287.40			
18.63		0.00	287.40			
19.63	13.3	0.00	287.40			
20.63		0.00	287.40			
21.63		0.00	287.40			
22.63	11.1	0.00	287.40			
23.63		0.00	287.40			

% POSSIBLE MINUTES OF SUNSHINE 95

ROU AIRPORT MAXIMUM TEMPERATURE 72.0 CENT

*Data suspect and discarded.

CHAMBER NUMBER 4
DAY 5 OF 5 11-20-75

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO* (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.044	0.000	0.006	0.006	1.42	0.88	0.54	0.37				
1.63	0.043	0.000	0.007	0.007	1.43	0.89	0.54	0.32				
2.63	0.041	0.000	0.007	0.007	1.44	0.91	0.53	0.34				
3.63	0.040	0.000	0.006	0.006	1.44	0.91	0.53	0.35				
4.63	0.039	0.000	0.006	0.006	1.44	0.96	0.48	0.60				
5.63	0.037	0.000	0.006	0.006	1.44	0.95	0.49	0.59				130
6.63	0.036	0.000	0.006	0.006	1.44	0.95	0.49	0.58				
7.63	0.035	0.000	0.006	0.006								
8.63	0.034	0.000	0.005	0.005								
9.63	0.035	0.000	0.006	0.006	1.44	0.93	0.50	0.67	0.024	0.005	0.009	
10.63	0.041	0.000	0.006	0.006								
11.63	0.052	0.000	0.007	0.007	1.39	0.92	0.47	0.65				
12.63	0.064	0.000	0.009	0.009	1.38	0.94	0.44	0.72				
13.63	0.075	0.000	0.010	0.010								
14.63	0.079	0.000	0.011	0.011	1.44	0.98	0.46	0.65	0.041	0.007	0.015	
15.63	0.079	0.000	0.010	0.010	1.43	1.00	0.43	0.61				
16.63	0.077	0.000	0.009	0.009	1.35	0.91	0.44	0.46				
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	7.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	3.3	0.10	5.80			
8.63		0.30	17.40			
9.63		0.52	43.76			
10.63	15.0	0.69	81.42			
11.63		0.78	126.24			
12.63		0.78	173.04			
13.63	20.6	0.70	216.80			
14.63		0.53	252.58			
15.63		0.22	272.56			
16.63	19.4	0.01	277.58			
17.63		0.00	277.80			
18.63		0.00	277.80			
19.63	13.9	0.00	277.80			
20.63		0.00	277.80			
21.63		0.00	277.80			
22.63	14.4	0.00	277.80			
23.63		0.00	277.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 70.0 CENT

*CO data erratic but retained. Shifts due to calibration changes.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 1- 9-76

PROPENE AND CO * 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.35 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30												
1.30												
2.30												
3.30												
4.30												
5.30	0.026	0.000	0.009	0.009	1.84	1.32	0.52	0.27				
6.30	0.018	0.002	0.071	0.073	1.66	1.39	0.27	3.71				
7.30	0.000	0.445	0.086	0.530	2.34	1.39	0.95	3.62				
8.30	0.000	0.442	0.092	0.534	2.28	1.38	0.91	3.63				
9.30	0.000	0.424	0.109	0.533	2.28	1.38	0.90	3.67				
10.30	0.000	0.388	0.139	0.527	2.27	1.37	0.89	3.62				
11.30	0.003	0.335	0.190	0.525	2.27	1.41	0.86	3.62				
12.30	0.006	0.276	0.235	0.511	2.25	1.44	0.81	3.60				
13.30	0.011	0.221	0.275	0.496	2.15	1.41	0.74	3.59				
14.30	0.017	0.176	0.305	0.481	2.10	1.40	0.71	3.55				
15.30	0.017	0.149	0.325	0.474	2.11	1.41	0.70	3.51				
16.30	0.009	0.128	0.339	0.467	2.06	1.40	0.66	3.48				
17.30	0.000	0.116	0.342	0.458	2.10	1.42	0.68	3.41				
18.30	0.000	0.111	0.330	0.442	2.08	1.39	0.69	3.34				
19.30	0.000	0.110	0.327	0.437	2.09	1.39	0.70	3.37				
20.30	0.000	0.109	0.329	0.438	2.04	1.40	0.64	3.39				
21.30	0.000	0.109	0.324	0.433	2.06	1.40	0.66	3.35				
22.30	0.000	0.108	0.324	0.432	2.09	1.45	0.64	3.35				
23.30	0.000	0.107	0.319	0.426	2.10	1.46	0.64	3.40				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-5.0	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-6.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	-8.9	0.02	0.36			
8.30		0.20	4.80			
9.30		0.44	21.12			
10.30	-5.6	0.65	51.30			
11.30		0.78	92.64			
12.30		0.82	140.16			
13.30	-1.1	0.76	188.28			
14.30		0.61	231.18			
15.30		0.39	263.82			
16.30	-1.1	0.14	282.72			
17.30		0.01	288.78			
18.30		0.00	289.20			
19.30	-3.3	0.00	289.20			
20.30		0.00	289.20			
21.30		0.00	289.20			
22.30	-6.1	0.00	289.20			
23.30		0.00	289.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 0.0 CENT

* The injections were made into ambient air rather than purified air. The chamber was flushed with ambient air until injections took place.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 1-10-76

PROPENE AND CO 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.35 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.106	0.314	0.420	2.06	1.46	0.61	3.37				
1.30	0.000	0.104	0.310	0.414	2.10	1.43	0.67	3.34				
2.30	0.000	0.104	0.307	0.411	2.13	1.43	0.69	3.32				
3.30	0.000	0.102	0.305	0.406	2.10	1.51	0.59	3.38				
4.30	0.000	0.104	0.303	0.406	2.08	1.44	0.64	3.31				
5.30	0.000	0.102	0.303	0.404	2.10	1.50	0.60	3.33				
6.30	0.000	0.102	0.301	0.402	2.13	1.42	0.71	3.30				
7.30	0.000	0.101	0.298	0.399	2.06	1.49	0.58	3.30				
8.30	0.011	0.107	0.289	0.396	2.10	1.49	0.61	3.30				
9.30	0.021	0.112	0.276	0.388	2.07	1.38	0.69	3.30				
10.30	0.033	0.103	0.280	0.383	2.04	1.45	0.59	3.30				
11.30	0.048	0.082	0.296	0.379	2.02	1.42	0.59	3.30				
12.30	0.070	0.060	0.292	0.352	1.98	1.43	0.55	3.32				
13.30	0.094	0.044	0.291	0.335	2.03	1.44	0.59	3.28				
14.30	0.105	0.027	0.289	0.316	1.98	1.41	0.57	3.27				
15.30	0.105	0.018	0.276	0.294	1.94	1.40	0.54	3.30				
16.30	0.091	0.010	0.268	0.278	1.90	1.44	0.47	3.25				
17.30	0.068	0.004	0.251	0.256	1.90	1.46	0.43	3.24				
18.30	0.051	0.003	0.229	0.232	1.90	1.46	0.44	3.21				
19.30	0.051	0.003	0.213	0.216	1.94	1.50	0.44	3.21				
20.30	0.032	0.003	0.198	0.201	1.92	1.50	0.42	3.22				
21.30	0.028	0.003	0.187	0.190	1.94	1.50	0.44	3.20				
22.30	0.022	0.003	0.182	0.185	1.93	1.50	0.43	3.17				
23.30	0.019	0.002	0.175	0.178	1.97	1.48	0.49	3.16				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-8.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-7.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	-10.0	0.03	0.54			
8.30		0.19	5.22			
9.30		0.41	20.58			
10.30	-1.7	0.63	49.14			
11.30		0.75	89.10			
12.30		0.78	134.64			
13.30	4.4	0.65	179.10			
14.30		0.41	213.78			
15.30		0.30	236.40			
16.30	5.0	0.07	250.26			
17.30		0.01	253.38			
18.30		0.00	253.80			
19.30	-0.6	0.00	253.80			
20.30		0.00	253.80			
21.30		0.00	253.80			
22.30	-2.2	0.00	253.80			
23.30		0.00	253.80			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 6.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 1-11-76

PROPENE AND CO 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.35 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.016	0.002	0.171	0.173	1.95	1.46	0.49	3.13				
1.30	0.014	0.002	0.171	0.173	1.98	1.46	0.53	3.11				
2.30	0.011	0.002	0.170	0.172	1.98	1.49	0.49	3.10				
3.30	0.011	0.002	0.168	0.170	1.97	1.52	0.45	3.12				
4.30	0.009	0.002	0.168	0.170	1.94	1.49	0.44	3.09				
5.30	0.007	0.003	0.166	0.169	1.94	1.53	0.41	3.08				
6.30	0.006	0.002	0.164	0.166	1.96	1.52	0.44	3.09				
7.30	0.006	0.002	0.161	0.164	1.94	1.48	0.46	3.12				
8.30	0.026	0.003	0.160	0.164	1.91	1.50	0.41	3.09				
9.30	0.045	0.018	0.143	0.161	1.94	1.54	0.40	3.11				
10.30	0.062	0.020	0.137	0.157	1.91	1.53	0.38	3.09				
11.30	0.080	0.016	0.137	0.153	1.93	1.50	0.43	3.09				
12.30	0.107	0.010	0.137	0.147	1.92	1.51	0.41	3.08				
13.30	0.132	0.009	0.130	0.139	1.89	1.48	0.41	3.09				
14.30	0.153	0.004	0.128	0.133	1.86	1.47	0.39	3.01				
15.30	0.156	0.003	0.124	0.127	1.86	1.53	0.34	3.08				
16.30	0.149	0.003	0.118	0.121	1.89	1.53	0.36	3.02				
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-2.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-0.6	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	0.0	0.01	0.18			
8.30		0.17	3.66			
9.30		0.27	15.66			
10.30	5.0	0.33	32.94			
11.30		0.29	52.02			
12.30		0.41	71.58			
13.30	9.4	0.37	95.46			
14.30		0.25	115.50			
15.30		0.10	127.80			
16.30	10.6	0.04	132.72			
17.30		0.00	134.40			
18.30		0.00	134.40			
19.30	7.2	0.00	134.40			
20.30		0.00	134.40			
21.30		0.00	134.40			
22.30	6.7	0.00	134.40			
23.30		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 18

RDU AIRPORT MAXIMUM TEMPERATURE 12.2 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 1- 9-76

URBAN MIX AND CO * 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47												
1.47												
2.47												
3.47												
4.47												
5.47	0.027	0.000	0.010	0.010	1.87	1.31	0.56	0.26				
6.47	0.000	0.251	0.092	0.343	4.26	1.38	2.88	4.08				
7.47	0.000	0.249	0.090	0.339	6.97	1.34	5.63	3.97				
8.47	0.000	0.228	0.110	0.338	6.96	1.36	5.59	4.02				
9.47	0.010	0.134	0.188	0.322	6.73	1.33	5.40	4.01				
10.47	0.089	0.032	0.259	0.291	6.62	1.35	5.27	4.00				
11.47	0.189	0.014	0.236	0.250	6.49	1.40	5.10	3.91				
12.47	0.255	0.007	0.209	0.216	6.41	1.41	5.00	3.89				
13.47	0.309	0.005	0.179	0.184	6.09	1.44	4.65	3.84				
14.47	0.344	0.004	0.151	0.155	5.89	1.37	4.51	3.83				
15.47	0.349	0.005	0.128	0.134	5.88	1.41	4.47	3.75				
16.47	0.326	0.004	0.109	0.113	5.66	1.38	4.28	3.70				
17.47	0.303	0.002	0.093	0.095	5.65	1.38	4.27	3.61				
18.47	0.295	0.001	0.082	0.083	5.59	1.41	4.18	3.56				
19.47	0.273	0.001	0.080	0.081	5.50	1.40	4.10	3.56				
20.47	0.261	0.000	0.077	0.077	5.46	1.41	4.05	3.58				
21.47	0.259	0.001	0.075	0.076	5.42	1.43	3.99	3.54				
22.47	0.241	0.001	0.074	0.075	5.42	1.45	3.98	3.53				
23.47	0.232	0.001	0.073	0.074	5.46	1.44	4.02	3.54				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-5.0	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-6.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	-8.9	0.02	0.56			
8.47		0.20	6.80			
9.47		0.44	25.52			
10.47	-5.6	0.65	57.80			
11.47		0.78	100.44			
12.47		0.82	148.36			
13.47	-1.1	0.76	195.88			
14.47		0.61	237.28			
15.47		0.39	267.72			
16.47	-1.1	0.14	284.12			
17.47		0.01	288.88			
18.47		0.00	289.20			
19.47	-3.3	0.00	289.20			
20.47		0.00	289.20			
21.47		0.00	289.20			
22.47	-6.1	0.00	289.20			
23.47		0.00	289.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 0.0 CENT

* The injections were made into ambient air rather than purified air. The chamber was flushed with ambient air until the injections took place.

CHAMBER NUMBER 3
DAY 2 OF 3 1-10-76

URBAN MIX AND CO 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.228	0.000	0.072	0.072	5.41	1.45	3.96	3.50				
1.47	0.221	0.000	0.072	0.072	5.38	1.43	3.94	3.52				
2.47	0.215	0.000	0.072	0.072	5.33	1.45	3.88	3.49				
3.47	0.212	0.000	0.071	0.071	5.34	1.44	3.90	3.43				
4.47	0.205	0.000	0.068	0.068	5.31	1.45	3.86	3.49				
5.47	0.201	0.000	0.070	0.070	5.32	1.41	3.91	3.41				
6.47	0.196	0.000	0.067	0.067	5.24	1.47	3.77	3.41				
7.47	0.190	0.000	0.067	0.067	5.29	1.45	3.84	3.44				
8.47	0.186	0.000	0.068	0.068	5.27	1.43	3.84	3.42				
9.47	0.178	0.001	0.071	0.072	5.16	1.44	3.72	3.44				
10.47	0.167	0.002	0.070	0.072	5.14	1.43	3.71	3.41				
11.47	0.161	0.002	0.070	0.072	5.10	1.44	3.66	3.40				
12.47	0.160	0.001	0.071	0.072	5.07	1.43	3.64	3.43				
13.47	0.160	0.001	0.070	0.071	5.10	1.46	3.63	3.40				
14.47	0.160	0.001	0.070	0.071	4.94	1.41	3.54	3.36				
15.47	0.156	0.001	0.070	0.071	4.89	1.40	3.49	3.31				
16.47	0.147	0.001	0.068	0.070	4.84	1.40	3.43	3.24				
17.47	0.139	0.001	0.068	0.070	4.76	1.42	3.35	3.20				
18.47	0.135	0.001	0.065	0.066	4.74	1.44	3.30	3.15				
19.47	0.128	0.001	0.064	0.065	4.79	1.48	3.31	3.18				
20.47	0.124	0.000	0.062	0.062	4.78	1.47	3.31	3.13				
21.47	0.122	0.000	0.061	0.061	4.75	1.46	3.29	3.13				
22.47	0.118	0.000	0.061	0.061	4.74	1.46	3.28	3.13				
23.47	0.117	0.000	0.059	0.059	4.69	1.50	3.19	3.12				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-8.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-7.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	-10.0	0.03	0.84			
8.47		0.19	7.12			
9.47		0.41	24.68			
10.47	-1.7	0.63	55.44			
11.47		0.75	96.60			
12.47		0.78	142.44			
13.47	4.4	0.65	185.60			
14.47		0.41	217.88			
15.47		0.30	239.40			
16.47	5.0	0.07	250.96			
17.47		0.01	253.48			
18.47		0.00	253.80			
19.47	-0.6	0.00	253.80			
20.47		0.00	253.80			
21.47		0.00	253.80			
22.47	-2.2	0.00	253.80			
23.47		0.00	253.80			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 6.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 1-11-76

URBAN MIX AND CO 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.112	0.000	0.059	0.059	4.69	1.44	3.24	3.10				
1.47	0.110	0.000	0.059	0.059	4.64	1.50	3.14	3.12				
2.47	0.107	0.000	0.059	0.059	4.63	1.55	3.08	3.14				
3.47	0.105	0.000	0.060	0.060	4.63	1.54	3.09	3.10				
4.47	0.104	0.001	0.061	0.062	4.63	1.53	3.10	3.12				
5.47	0.101	0.001	0.061	0.062	4.64	1.54	3.10	3.08				
6.47	0.098	0.001	0.061	0.062	4.65	1.53	3.12	3.08				
7.47	0.096	0.002	0.062	0.064	4.63	1.57	3.06	3.09				
8.47	0.093	0.003	0.060	0.063	4.63	1.48	3.15	3.03				
9.47	0.089	0.003	0.061	0.064	4.59	1.53	3.06	2.99				
10.47	0.086	0.003	0.061	0.064	4.61	1.48	3.13	2.95				
11.47	0.084	0.003	0.060	0.063	4.50	1.52	2.98	2.98				
12.47	0.089	0.003	0.060	0.063	4.43	1.48	2.95	2.91				
13.47	0.091	0.003	0.060	0.063	4.36	1.49	2.87	2.82				
14.47	0.096	0.003	0.059	0.062	4.29	1.48	2.81	2.82				
15.47	0.096	0.004	0.058	0.062	4.23	1.45	2.77	2.74				
16.47	0.092	0.002	0.057	0.059	4.20	1.52	2.68	2.68				
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-2.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-0.6	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	0.0	0.01	0.28			
8.47		0.17	5.36			
9.47		0.27	18.36			
10.47	5.0	0.33	36.24			
11.47		0.29	54.92			
12.47		0.41	75.68			
13.47	9.4	0.37	99.16			
14.47		0.25	118.00			
15.47		0.10	128.80			
16.47	10.6	0.04	133.12			
17.47		0.00	134.40			
18.47		0.00	134.40			
19.47	7.2	0.00	134.40			
20.47		0.00	134.40			
21.47		0.00	134.40			
22.47	6.1	0.00	134.40			
23.47		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 18

RDU AIRPORT MAXIMUM TEMPERATURE 12.2 CENT

CHAMBER NUMBER 1
DAY 1 OF 3 4-14-76

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.002	0.002								
1.13	0.000	0.000	0.002	0.002	0.49	0.43	0.07	0.37				
2.13	0.000	0.000	0.002	0.002	0.46	0.44	0.02	0.37				
3.13	0.000	0.000	0.002	0.002	0.45	0.43	0.01	0.36				0
4.13	0.000	0.000	0.002	0.002	5.57	0.45	5.12	8.09				
5.13	0.000	0.701	0.164	0.864	6.19	0.46	5.73	8.02				
6.13	0.000	0.660	0.176	0.836	5.27	0.44	4.84	6.93				
7.13	0.000	0.413	0.297	0.710	4.20	0.44	3.76	6.12				
8.13	0.156	0.014	0.514	0.528	5.59	0.45	5.14	5.37				
9.13	0.243	0.009	0.389	0.398	3.07	0.45	2.62	4.74	0.454	0.093		
10.13	0.381	0.003	0.292	0.295	2.54	0.46	2.08	4.14				
11.13	0.532	0.002	0.207	0.210	2.19	0.45	1.74	5.71				0
12.13	0.616	0.002	0.154	0.156	1.89	0.48	1.41	3.26				
13.13	0.612	0.001	0.121	0.122	1.71	0.50	1.22	2.89				
14.13	0.572	0.000	0.097	0.097					*	0.019	0.042	
15.13	0.521	0.000	0.077	0.077	1.42	0.53	0.89	2.26				0
16.13	0.453	0.000	0.061	0.061	1.26	0.56	0.70	2.00				
17.13	0.382	0.000	0.049	0.049	1.19	0.59	0.60	1.77				
18.13	0.313	0.000	0.040	0.040	1.06	0.59	0.47	1.50				
19.13	0.252	0.000	0.032	0.032	1.05	0.61	0.44	1.32				
20.13	0.207	0.000	0.027	0.027	1.03	0.58	0.44	1.26				
21.13	0.171	0.000	0.024	0.024	1.01	0.67	0.34	1.20				
22.13	0.142	0.000	0.020	0.020	0.99	0.69	0.51	1.11				
23.13	0.119	0.000	0.019	0.019								

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

*Data suspect and deleted.

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	11.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.12	0.96	51.82	6.00	
7.13	18.6	0.59	10.52			
8.13		0.70	36.20			
9.13		0.97	80.56			
10.13	18.9	1.18	140.24			
11.13		1.30	212.00			
12.13		1.31	290.08			
13.13	25.0	1.24	368.12			
14.13		1.09	441.32			
15.13		0.89	505.12			
16.13	27.2	0.56	555.88			
17.13		0.26	587.08			
18.13		0.05	600.88			
19.13	20.6	0.00	602.40			
20.13		0.00	602.40			
21.13		0.00	602.40			
22.13	15.6	0.00	602.40			
23.13		0.00	602.40			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 4-15-76

MIX, HC+NOX SLUG* 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.098	0.000	0.017	0.017	0.97	0.69	0.28	1.04				
1.13	0.081	0.000	0.016	0.016	0.84	0.64	0.19	0.88				
2.13	0.067	0.000	0.015	0.015	0.92	0.68	0.24	0.91				
3.13	0.056	0.000	0.013	0.013	0.91	0.66	0.25	0.86				
4.13	0.046	0.000	0.012	0.012	0.87	0.67	0.20	0.81				
5.13	0.000	0.253	0.187	0.441	2.96	0.67	2.29	0.75				160
6.13	0.000	0.217	0.147	0.364	3.27	0.67	2.60	0.72				
7.13	0.004	0.103	0.206	0.309	2.74	0.61	2.13	0.62				
8.13	0.104	0.007	0.232	0.240	2.37	0.63	1.74	0.70				
9.13	0.186	0.002	0.185	0.187	2.07	0.61	1.46	0.71				
10.13	0.294	0.000	0.140	0.140	1.82	0.60	1.22	0.75	0.293	0.055	0.061	
11.13	0.384	0.000	0.103	0.103	1.50	0.56	0.94	0.67				
12.13	0.466	0.000	0.079	0.079	1.46	0.59	0.87	0.79				
13.13	0.524	0.000	0.067	0.067								130
14.13	0.549	0.000	0.061	0.061	1.56	0.63	0.93	0.88				
15.13	0.553	0.000	0.056	0.056	1.44	0.68	0.76	0.91				
16.13	0.545	0.000	0.051	0.051	1.44	0.70	0.74	0.96	0.611	0.022	0.033	
17.13	0.527	0.000	0.048	0.048	1.44	0.71	0.73	0.98				
18.13	0.508	0.000	0.043	0.043	1.41	0.69	0.72	0.96				100
19.13	0.487	0.000	0.039	0.039	1.41	0.71	0.70	0.94				
20.13	0.471	0.000	0.036	0.036	1.44	0.74	0.70	0.96				
21.13	0.453	0.000	0.033	0.033	1.42	0.76	0.66	0.96				
22.13	0.444	0.000	0.033	0.033	1.42	0.79	0.64	0.99				
23.13	0.433	0.000	0.032	0.032	1.45	0.80	0.65	1.00				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	16.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.9	0.00	0.00			
5.13		0.01	0.08			
6.13		0.12	1.56			
7.13	15.9	0.39	10.92			
8.13		0.68	36.84			
9.13		0.95	79.80			
10.13	21.7	1.02	137.16			
11.13		1.30	200.60			
12.13		1.06	276.68	51.82		12.00
13.13	26.7	1.30	342.20			
14.13		0.92	417.16			
15.13		0.83	471.64			
16.13	28.9	0.55	519.20			
17.13		0.25	549.80			
18.13		0.02	562.96			
19.13	23.9	0.00	564.00			
20.13		0.00	564.00			
21.13		0.00	564.00			
22.13	20.6	0.00	564.00			
23.13		0.00	564.00			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

*A second reactant injection took place at 0500 EST, 15 April 1976. The target injections were 2.5 ppmC urban mix and 0.500 ppm NO_x.

CHAMBER NUMBER 1
DAY 3 OF 3 4-16-76

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPm)	CO (PPM)	NHK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.425	0.000	0.031	0.031	1.47	0.80	0.67	0.98				
1.13	0.415	0.000	0.030	0.030	1.58	0.75	0.63	0.89				
2.13	0.403	0.000	0.028	0.028	1.47	0.79	0.69	0.97				
3.13	0.390	0.000	0.028	0.028	1.46	0.80	0.66	0.98				
4.13	0.381	0.000	0.027	0.027	1.46	0.81	0.66	0.99				
5.13	0.372	0.000	0.027	0.027	1.46	0.81	0.66	0.99				0
6.13	0.552	0.000	0.027	0.027	1.47	0.79	0.68	0.94				
7.13	0.348	0.000	0.028	0.028	1.49	0.82	0.67	0.98				
8.13	0.332	0.000	0.029	0.029	1.52	0.82	0.70	0.99				
9.13	0.318	0.000	0.031	0.031	1.52	0.81	0.70	0.99				
10.13	0.314	0.000	0.032	0.032	1.52	0.84	0.68	1.03				
11.13	0.320	0.000	0.032	0.032	1.40	0.80	0.61	0.98				
12.13	0.330	0.000	0.032	0.032	1.51	0.83	0.67	1.08				
13.13	0.342	0.000	0.030	0.030	1.52	0.87	0.65	1.11				
14.13	0.344	0.000	0.029	0.029	1.49	0.89	0.59	1.09	0.572*	0.019	0.111	
15.13	0.339	0.000	0.028	0.028	1.49	0.92	0.57	1.11				
16.13	0.328	0.000	0.027	0.027	1.50	0.92	0.58	1.11				
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.6	0.00	0.00			
5.13		0.01	0.08			
6.13		0.13	1.64			
7.13	15.6	0.39	11.52			
8.13		0.65	37.00			
9.13		0.90	78.00			
10.13	23.9	1.14	133.92			
11.13		1.27	203.36			
12.13		1.26	279.48			
13.13	29.4	1.25	355.00			
14.13		0.99	427.92			
15.13		0.75	485.40			
16.13	28.9	0.53	528.64			
17.13		0.25	558.20			
18.13		0.03	571.44			
19.13	24.4	0.00	573.00			
20.13		0.00	573.00			
21.13		0.00	573.00			
22.13	20.6	0.00	573.00			
23.13		0.00	573.00			

% POSSIBLE MINUTES OF SUNSHINE 89

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

*Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 4-14-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.000	0.002	0.002								
1.30	0.000	0.000	0.002	0.002	0.36	0.36	0.01	0.28				
2.30	0.000	0.000	0.002	0.002	0.41	0.39	0.02	0.57				
3.30	0.000	0.000	0.002	0.002	0.39	0.39	0.00	0.57				
4.30	0.000	0.000	0.002	0.002	0.38	0.38	0.00	5.30				
5.30	0.000	0.561	0.156	0.718	5.82	0.39	5.43	8.68				0
6.30	0.000	0.507	0.174	0.681	5.78	0.39	5.40	8.47				
7.30	0.006	0.182	0.358	0.540	4.31	0.34	3.96	7.23				
8.30	0.182	0.011	0.378	0.388	3.83	0.35	3.48	6.41				
9.30	0.234	0.011	0.289	0.299	3.31	0.34	2.97	5.60				
10.30	0.326	0.013	0.215	0.228	2.85	0.35	2.49	4.51	0.358	0.096		
11.30	0.444	0.015	0.156	0.171	2.40	0.34	2.06	4.55				
12.30	0.498	0.013	0.120	0.133	2.11	0.35	1.76	3.88				
13.30	0.487	0.013	0.098	0.111	1.83	0.35	1.48	3.44				0
14.30	0.461	0.012	0.096	0.108	1.63	0.37	1.26	3.08				
15.30	0.425	0.011	0.070	0.080					*	0.016	0.288	
16.30	0.373	0.009	0.058	0.066	1.29	0.38	0.91	2.45				
17.30	0.321	0.009	0.048	0.057	1.16	0.40	0.76	2.18				0
18.30	0.265	0.003	0.039	0.042	1.07	0.42	0.65	1.93				
19.30	0.217	0.000	0.032	0.032	0.92	0.43	0.49	1.66				
20.30	0.182	0.000	0.027	0.027	0.88	0.44	0.44	1.42				
21.30	0.154	0.000	0.022	0.022	0.91	0.44	0.47	1.38				
22.30	0.128	0.000	0.019	0.019	0.87	0.50	0.37	1.27				
23.30	0.111	0.000	0.018	0.018	0.85	0.51	0.32	1.19				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	11.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.12	2.16	65.70	6.00	
7.30	10.6	0.39	14.22			
8.30		0.70	43.20			
9.30		0.97	90.06			
10.30	18.9	1.18	152.04			
11.30		1.30	225.00			
12.30		1.31	303.18			
13.30	25.0	1.24	380.52			
14.30		1.09	452.22			
15.30		0.89	514.02			
16.30	27.2	0.56	561.48			
17.30		0.26	589.68			
18.30		0.03	601.14			
19.30	29.6	0.00	602.40			
20.30		0.00	602.40			
21.30		0.00	602.40			
22.30	15.6	0.00	602.40			
23.30		0.00	602.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

*Data suspect and deleted.

CHAMBER NUMBER 2
DAY 2 OF 3 4-15-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	LN (/CMS)
0.30	0.094	0.000	0.016	0.016	0.79	0.50	0.29	1.11				
1.30	0.079	0.000	0.014	0.014	0.63	0.45	0.18	0.93				
2.30	0.067	0.000	0.014	0.014	0.71	0.50	0.22	0.91				
3.30	0.057	0.000	0.012	0.012	0.70	0.46	0.24	0.87				
4.30	0.048	0.000	0.011	0.011	0.65	0.46	0.19	0.81				
5.30	0.040	0.000	0.010	0.010	0.64	0.47	0.17	0.77				210
6.30	0.032	0.000	0.009	0.009	0.65	0.46	0.19	0.72				
7.30	0.028	0.000	0.009	0.009	0.52	0.40	0.12	0.62				
8.30	0.026	0.002	0.011	0.013	0.58	0.44	0.14	0.69				
9.30	0.052	0.010	0.011	0.020	0.50	0.43	0.11	0.68				
10.30	0.045	0.010	0.010	0.019	0.52	0.44	0.08	0.68	0.038	0.007	0.084	
11.30	0.059	0.013	0.013	0.026	0.43	0.37	0.06	0.61				
12.30	0.076	0.011	0.014	0.025	0.50	0.42	0.08	0.67				180
13.30	0.092	0.011	0.014	0.025								
14.30	0.104	0.011	0.015	0.026	0.55	0.44	0.11	0.70				
15.30	0.111	0.011	0.015	0.026	0.58	0.46	0.12	0.73				
16.30	0.112	0.015	0.016	0.029	0.61	0.49	0.13	0.76	0.192*	0.018	0.028	
17.30	0.110	0.012	0.015	0.027	0.61	0.48	0.13	0.73				
18.30	0.107	0.007	0.016	0.024	0.58	0.46	0.12	0.72				100
19.30	0.102	0.001	0.014	0.015	0.64	0.50	0.14	0.74				
20.30	0.096	0.000	0.013	0.013	0.69	0.55	0.14	0.73				
21.30	0.093	0.000	0.013	0.013	0.71	0.57	0.14	0.75				
22.30	0.090	0.003	0.011	0.014	0.71	0.58	0.13	0.77				
23.30	0.084	0.004	0.011	0.015	0.72	0.58	0.14	0.79				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	16.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.9	0.00	0.00			
5.30		0.01	0.18			
6.30		0.12	2.76			
7.30	15.9	0.59	14.82			
8.30		0.68	45.44			
9.30		0.95	89.10			
10.30	21.7	1.02	147.56			
11.30		1.30	213.60			
12.30		1.06	287.28	63.15		12.00
13.30	26.7	1.30	355.20			
14.30		0.92	426.36			
15.30		0.83	479.04			
16.30	28.9	0.55	524.70			
17.30		0.25	552.30			
18.30		0.02	563.16			
19.30	23.9	0.00	564.00			
20.30		0.00	564.00			
21.30		0.00	564.00			
22.30	20.6	0.00	564.00			
23.30		0.00	564.00			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

*Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 5 OF 5 4-16-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.080	0.002	0.011	0.013	0.72	0.60	0.12	0.78				
1.30	0.077	0.000	0.011	0.011	0.67	0.55	0.13	0.71				
2.30	0.074	0.000	0.011	0.011	0.74	0.58	0.16	0.77				
3.30	0.070	0.000	0.010	0.010	0.74	0.58	0.16	0.78				
4.30	0.068	0.000	0.010	0.010	0.76	0.61	0.15	0.79				
5.30	0.064	0.000	0.010	0.010	0.77	0.60	0.17	0.79				0
6.30	0.062	0.000	0.010	0.010	0.77	0.59	0.18	0.75				
7.30	0.057	0.001	0.011	0.012	0.79	0.61	0.18	0.78				
8.30	0.055	0.003	0.012	0.015	0.80	0.62	0.18	0.80	*	0.013	0.073	
9.30	0.053	0.010	0.014	0.024	0.79	0.61	0.18	0.78				
10.30	0.065	0.012	0.015	0.027	0.80	0.61	0.19	0.80				
11.30	0.086	0.011	0.016	0.027	0.73	0.56	0.17	0.75				
12.30	0.104	0.011	0.016	0.027	0.81	0.60	0.21	0.81				
13.30	0.122	0.011	0.017	0.028	0.82	0.62	0.20	0.85				
14.30	0.132	0.010	0.016	0.026	0.80	0.63	0.18	0.84	*	0.022	0.002	
15.30	0.137	0.006	0.017	0.024	0.81	0.64	0.17	0.84				
16.30	0.137	0.006	0.017	0.024	0.81	0.64	0.17	0.84				
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.6	0.00	0.00			
5.30		0.01	0.18			
6.30		0.13	2.94			
7.30	15.6	0.59	15.42			
8.30		0.65	45.50			
9.30		0.90	87.00			
10.30	23.9	1.14	145.32			
11.30		1.27	216.06			
12.30		1.26	292.08			
13.30	29.4	1.25	367.50			
14.30		0.99	437.82			
15.30		0.75	492.90			
16.30	28.9	0.53	533.94			
17.30		0.25	560.70			
18.30		0.03	571.74			
19.30	24.4	0.00	573.00			
20.30		0.00	573.00			
21.30		0.00	573.00			
22.30	20.6	0.00	573.00			
23.30		0.00	573.00			

4 POSSIBLE MINUTES OF SUNSHINE 89

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

*Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 1 OF 3 4-14-76

MIX, HC+NOX SLUG 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.002	0.002								
1.47	0.000	0.000	0.002	0.002	0.77	0.74	0.03	0.28				
2.47	0.000	0.000	0.002	0.002	0.74	0.70	0.04	0.36				
3.47	0.000	0.000	0.002	0.002	0.61	0.58	0.02	0.36				
4.47	0.000	0.000	0.002	0.002	0.54	0.54	0.00	8.45				0
5.47	0.000	0.513	0.116	0.629	5.22	0.52	4.70	8.36				
6.47	0.000	0.445	0.138	0.583	4.95	0.50	4.44	7.95				
7.47	0.012	0.103	0.368	0.471	4.00	0.46	3.54	6.78				
8.47	0.207	0.006	0.323	0.329	3.27	0.50	2.78	5.91				
9.47	0.289	0.009	0.243	0.251	2.84	0.51	2.33	5.14				
10.47	0.420	0.006	0.181	0.187	2.44	0.53	1.91	4.51	0.406	0.045		
11.47	0.522	0.009	0.135	0.143	2.06	0.51	1.54	3.89				
12.47	0.532	0.004	0.094	0.098	1.79	0.53	1.26	3.41				0
13.47	0.518	0.002	0.088	0.090	1.56	0.55	1.02	2.97				
14.47	0.484	0.002	0.083	0.086	1.43	0.57	0.86	2.59				
15.47	0.457	0.001	0.059	0.060	1.25	0.60	0.65	2.26	*	0.017	0.406	
16.47	0.382	0.001	0.048	0.049	1.19	0.61	0.58	2.00				0
17.47	0.322	0.001	0.039	0.040	1.11	0.61	0.50	1.76				
18.47	0.267	0.001	0.031	0.032	1.02	0.62	0.40	1.58				
19.47	0.220	0.000	0.026	0.026	0.93	0.61	0.33	1.38				
20.47	0.185	0.000	0.021	0.021	0.83	0.56	0.26	1.13				
21.47	0.156	0.000	0.018	0.018	0.92	0.61	0.31	1.06				
22.47	0.132	0.000	0.016	0.016	0.90	0.65	0.25	1.09				
23.47	0.112	0.000	0.013	0.013	0.87	0.65	0.22	1.02				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	11.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.12	5.36	58.05	6.00	
7.47	10.6	0.39	18.12			
8.47		0.70	50.20			
9.47		0.97	99.76			
10.47	18.9	1.18	163.84			
11.47		1.30	238.00			
12.47		1.31	316.28			
13.47	25.0	1.24	392.92			
14.47		1.09	463.12			
15.47		0.89	522.92			
16.47	27.2	0.56	567.08			
17.47		0.26	592.28			
18.47		0.03	601.44			
19.47	20.6	0.00	602.40			
20.47		0.00	602.40			
21.47		0.00	602.40			
22.47	15.6	0.00	602.40			
23.47		0.00	602.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 81.0 CENT

*Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 4-15-76

MIX, HC+NOx SLUG* 95% DILUTION
TARGET INITIAL HC/NOx: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOx (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.096	0.000	0.012	0.012	0.83	0.66	0.17	0.97				
1.47	0.079	0.000	0.011	0.011	0.74	0.61	0.13	0.83				
2.47	0.066	0.000	0.009	0.009	0.79	0.63	0.16	0.83				
3.47	0.056	0.000	0.011	0.011	0.77	0.61	0.17	0.78				
4.47	0.047	0.000	0.009	0.009	0.74	0.61	0.13	0.72				
5.47	0.000	0.179	0.118	0.296	2.11	0.61	1.50	0.70				170
6.47	0.000	0.142	0.112	0.255	1.92	0.60	1.32	0.67				
7.47	0.010	0.067	0.145	0.213	1.61	0.56	1.05	0.61				
8.47	0.053	0.021	0.152	0.173	1.47	0.57	0.90	0.63				
9.47	0.108	0.011	0.128	0.139	1.30	0.56	0.74	0.65				
10.47	0.167	0.006	0.099	0.106	1.19	0.58	0.61	0.67	0.152	0.075	0.175	
11.47	0.234	0.002	0.073	0.075	1.02	0.54	0.48	0.62				
12.47	0.316	0.001	0.055	0.056	1.03	0.59	0.44	0.70				
13.47	0.364	0.001	0.045	0.046								
14.47	0.391	0.000	0.041	0.041	1.10	0.67	0.43	0.77				100
15.47	0.399	0.000	0.036	0.036	1.13	0.71	0.42	0.80				
16.47	0.394	0.001	0.034	0.035	1.16	0.75	0.41	0.85	0.494	0.013	0.061	
17.47	0.380	0.002	0.032	0.034	1.16	0.76	0.40	0.83				
18.47	0.361	0.002	0.028	0.030	1.17	0.76	0.40	0.81				0
19.47	0.347	0.001	0.026	0.027	1.22	0.81	0.40	0.81				
20.47	0.335	0.000	0.021	0.021	1.21	0.84	0.37	0.82				
21.47	0.328	0.001	0.021	0.022	1.21	0.86	0.35	0.82				
22.47	0.317	0.003	0.021	0.025	1.23	0.89	0.34	0.85				
23.47	0.305	0.003	0.020	0.024	1.26	0.90	0.36	0.86				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	16.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	13.9	0.00	0.00			
5.47		0.01	0.28			
6.47		0.12	5.96			
7.47	13.9	0.39	18.72			
8.47		0.68	56.68			
9.47		0.95	112.40			
10.47	21.7	1.02	171.56			
11.47		1.30	240.40			
12.47		1.06	311.68	58.05		12.00
13.47	26.7	1.30	382.00			
14.47		0.92	449.36			
15.47		0.83	502.04			
16.47	28.9	0.55	540.00			
17.47		0.25	568.60			
18.47		0.02	577.16			
19.47	25.9	0.00	577.80			
20.47		0.00	577.80			
21.47		0.00	577.80			
22.47	20.6	0.00	577.80			
23.47		0.00	577.80			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 85.0 CENT

*A second reactant injection took place at 0500 EST, 15 April 1976. The target injections were 1.25 ppmC urban mix and 0.350 ppm NO_x.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 4-16-76

MIX, HC+NOx SLUG 95% DILUTION
TARGET INITIAL HC/NOx: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.294	0.002	0.019	0.021	1.28	0.93	0.35	0.85				
1.47	0.284	0.000	0.018	0.018	1.25	0.89	0.36	0.80				
2.47	0.275	0.000	0.017	0.017	1.29	0.93	0.36	0.83				
3.47	0.266	0.000	0.016	0.016	1.30	0.94	0.36	0.85				
4.47	0.260	0.000	0.016	0.016	1.31	0.95	0.36	0.83				
5.47	0.252	0.000	0.016	0.016	1.32	0.95	0.36	0.85				150
6.47	0.245	0.000	0.017	0.017	1.33	0.94	0.39	0.82				
7.47	0.235	0.002	0.017	0.019	1.34	0.96	0.38	0.82				
8.47	0.225	0.003	0.019	0.022	1.36	0.99	0.37	0.84	*	0.005	0.018	
9.47	0.219	0.002	0.020	0.022	1.37	0.98	0.39	0.85				
10.47	0.222	0.003	0.022	0.026	1.39	1.00	0.39	0.88				
11.47	0.232	0.001	0.022	0.024	1.35	0.98	0.37	0.86				
12.47	0.242	0.001	0.022	0.024	1.41	1.03	0.38	0.91				
13.47	0.250	0.000	0.021	0.021	1.42	1.07	0.35	0.92				
14.47	0.252	0.000	0.019	0.019	1.42	1.10	0.32	0.91	*	0.024	0.037	
15.47	0.252	0.000	0.019	0.019	1.42	1.13	0.29	0.93				
16.47	0.246	0.000	0.018	0.018	1.44	1.14	0.30	0.92				
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.6	0.00	0.00			
5.47		0.01	0.28			
6.47		0.13	4.24			
7.47	15.6	0.39	19.52			
8.47		0.65	50.00			
9.47		0.90	96.00			
10.47	25.9	1.14	156.72			
11.47		1.27	228.76			
12.47		1.26	304.68			
13.47	29.4	1.25	380.00			
14.47		0.99	447.72			
15.47		0.75	500.40			
16.47	28.9	0.53	539.28			
17.47		0.25	565.20			
18.47		0.03	572.04			
19.47	24.4	0.00	575.00			
20.47		0.00	575.00			
21.47		0.00	575.00			
22.47	20.6	0.00	575.00			
23.47		0.00	575.00			

% POSSIBLE MINUTES OF SUNSHINE 89

RDU AIRPORT MAXIMUM TEMPERATURE 86.0 CENT

*Data suspect and deleted.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 5 4-14-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.002	0.002								
1.63	0.000	0.000	0.002	0.002								
2.63	0.000	0.000	0.002	0.002	1.04	0.99	0.05	0.36				
3.63	0.000	0.000	0.002	0.002	0.95	0.95	0.00	0.33				
4.63	0.000	0.000	0.002	0.002	0.91	0.90	0.01	7.77				0
5.63	0.000	0.521	0.112	0.633	4.41	0.90	3.50	7.80				
6.63	0.000	0.434	0.129	0.564	4.09	0.90	3.20	7.15				
7.63	0.003	0.198	0.248	0.442	3.40	0.85	2.56	5.98				
8.63	0.067	0.024	0.309	0.333	2.93	0.87	2.06	5.15				
9.63	0.135	0.018	0.244	0.262	2.66	0.88	1.78	4.37				
10.63	0.193	0.014	0.187	0.201	2.44	0.85	1.59	5.76	0.184	0.105		
11.63	0.257	0.014	0.135	0.149	2.21	0.89	1.33	5.22				
12.63	0.320	0.014	0.094	0.108	2.04	0.90	1.14	2.77				0
13.63	0.355	0.014	0.068	0.082	1.87	0.90	0.96	2.43				
14.63	0.333	0.016	0.051	0.067	1.81	0.94	0.86	2.11	*	0.017	0.464	
15.63	0.298	0.015	0.043	0.058	1.66	0.99	0.68	1.88				
16.63	0.230	0.009	0.035	0.044	1.64	0.99	0.66	1.64				0
17.63	0.187	0.009	0.030	0.039	1.60	1.01	0.60	1.45				
18.63	0.152	0.002	0.024	0.026	1.58	1.04	0.54	1.32				
19.63	0.125	0.000	0.019	0.019	1.52	1.05	0.47	1.19				
20.63	0.103	0.000	0.016	0.016								
21.63	0.086	0.000	0.014	0.014	1.51	1.09	0.43	0.94				
22.63	0.072	0.000	0.012	0.012	1.50	1.14	0.36	0.92				
23.63	0.060	0.000	0.012	0.012	1.48	1.15	0.32	0.85				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	11.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.12	4.56	62.58	6.00	
7.63	10.6	0.39	22.02			
8.63		0.70	57.20			
9.63		0.97	109.46			
10.63	18.9	1.18	175.64			
11.63		1.30	251.00			
12.63		1.31	329.58			
13.63	25.0	1.24	405.52			
14.63		1.09	474.02			
15.63		0.89	531.82			
16.63	27.2	0.56	572.64			
17.63		0.26	594.88			
18.63		0.03	601.74			
19.63	20.6	0.00	602.40			
20.63		0.00	602.40			
21.63		0.00	602.40			
22.63	15.6	0.00	602.40			
23.63		0.00	602.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

*Data suspect and deleted.

CHAMBER NUMBER 4
DAY 2 OF 5 4-15-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.049	0.000	0.011	0.011	1.47	1.16	0.31	0.78				
1.63	0.041	0.000	0.009	0.009	1.43	1.12	0.31	0.72				
2.63	0.032	0.000	0.009	0.009	1.44	1.15	0.28					
3.63	0.027	0.000	0.007	0.007	1.43	1.15	0.28	0.65				
4.63	0.021	0.000	0.005	0.005	1.41	1.15	0.25	0.62				0
5.63	0.018	0.000	0.005	0.005	1.41	1.16	0.24	0.60				
6.63	0.015	0.000	0.005	0.005	1.41	1.16	0.24	0.58				
7.63	0.017	0.000	0.006	0.006	1.38	1.14	0.24	0.56				
8.63	0.017	0.009	0.009	0.017	1.37	1.16	0.20	0.58				
9.63	0.036	0.011	0.009	0.019	1.35	1.17	0.18	0.57				
10.63	0.041	0.014	0.010	0.024	1.34	1.18	0.16	0.56	0.036	0.013	0.409	
11.63	0.057	0.018	0.011	0.029	1.31	1.15	0.16	0.55				
12.63	0.083	0.020	0.012	0.032	1.33	1.16	0.16	0.60				0
13.63	0.091	0.020	0.012	0.032								
14.63	0.105	0.024	0.014	0.037	1.41	1.21	0.20	0.63				
15.63	0.113	0.024	0.014	0.037	1.44	1.23	0.22	0.66	0.097	0.005	0.046	
16.63	0.114	0.021	0.014	0.035	1.48	1.24	0.23	0.70				
17.63	0.108	0.015	0.015	0.030	1.48	1.25	0.23	0.67				0
18.63	0.104	0.004	0.014	0.018	1.53	1.26	0.27	0.70				
19.63	0.101	0.001	0.013	0.014	1.55	1.29	0.26	0.68				
20.63	0.095	0.000	0.013	0.013	1.53	1.30	0.23	0.69				
21.63	0.091	0.003	0.012	0.015	1.53	1.31	0.22	0.70				
22.63	0.088	0.004	0.012	0.016	1.56	1.33	0.23	0.71				
23.63	0.083	0.003	0.011	0.014	1.57	1.33	0.24	0.73				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	16.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	13.9	0.00	0.00			
5.63		0.01	0.38			
6.63		0.12	5.16			
7.63	15.9	0.39	22.62			
8.63		0.68	51.04			
9.63		0.95	108.10			
10.63	21.7	1.02	167.76			
11.63		1.30	259.60	62.58		12.00
12.63		1.06	308.48			
13.63	26.7	1.30	381.20			
14.63		0.92	444.76			
15.63		0.83	496.54			
16.63	28.9	0.55	535.70			
17.63		0.25	557.30			
18.63		0.02	563.56			
19.63	25.9	0.00	564.00			
20.63		0.00	564.00			
21.63		0.00	564.00			
22.63	20.6	0.00	564.00			
23.63		0.00	564.00			

% POSSIBLE MINUTES OF SUNSHINE 93

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 5 OF 5 4-16-76

URBAN MIX 95% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.080	0.000	0.011	0.011	1.56	1.32	0.24	0.72				
1.63	0.078	0.000	0.011	0.011	1.55	1.28	0.27	0.71				
2.63	0.075	0.000	0.011	0.011	1.57	1.31	0.26	0.71				
3.63	0.072	0.000	0.011	0.011	1.58	1.33	0.25	0.71				
4.63	0.068	0.000	0.011	0.011	1.59	1.32	0.27	0.72				0
5.63	0.064	0.000	0.011	0.011	1.60	1.33	0.27	0.70				
6.63	0.064	0.000	0.011	0.011	1.61	1.27	0.33	0.70				
7.63	0.070	0.003	0.011	0.014	1.61	1.34	0.27	0.71				
8.63	0.079	0.009	0.013	0.021	1.60	1.34	0.26	0.74	0.069	0.004	0.052	
9.63	0.089	0.013	0.014	0.027	1.60	1.31	0.28	0.71				
10.63	0.114	0.019	0.015	0.034	1.57	1.31	0.26	0.73				
11.63	0.140	0.024	0.016	0.040	1.55	1.28	0.27	0.73				
12.63	0.158	0.025	0.017	0.042	1.57	1.31	0.26	0.77				
13.63	0.168	0.022	0.017	0.040								
14.63	0.170	0.021	0.018	0.040	1.58	1.35	0.23	0.79	0.301*	0.022	0.008	
15.63	0.171	0.020	0.019	0.040	1.60	1.35	0.25	0.81				
16.63		0.018	0.018	0.036	1.61	1.35	0.26	0.82				
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.6	0.00	0.00			
5.63		0.01	0.38			
6.63		0.13	5.54			
7.63	15.6	0.39	23.22			
8.63		0.65	50.50			
9.63		0.90	105.00			
10.63	25.9	1.14	168.12			
11.63		1.27	241.86			
12.63		1.26	317.28			
13.63	29.4	1.25	392.50			
14.63		0.99	457.62			
15.63		0.75	507.90			
16.63	28.9	0.53	544.54			
17.63		0.25	565.70			
18.63		0.03	572.54			
19.63	20.4	0.00	573.00			
20.63		0.00	573.00			
21.63		0.00	573.00			
22.63	20.6	0.00	573.00			
23.63		0.00	573.00			

% POSSIBLE MINUTES OF SUNSHINE 89

RDU AIRPORT MAXIMUM TEMPERATURE 30.0 CENT

*Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 4-28-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.003	0.000	0.002	0.002	1.76	1.70	0.06	0.31				
1.97	0.002	0.000	0.002	0.002	1.83	1.76	0.06	0.40				
2.97	0.002	0.000	0.002	0.002	1.86	1.81	0.05	0.41				
3.97	0.001	0.000	0.002	0.002	1.88	1.83	0.05	0.47				
4.97	0.000	0.083	0.019	0.103	2.41	1.78	0.63	8.32				470
5.97	0.001	0.081	0.020	0.102	2.83	1.82	1.01	8.32				
6.97	0.006	0.044	0.055	0.098	2.79	1.84	0.96	8.32				
7.97	0.108	0.002	0.081	0.083	2.68	1.86	0.83	8.30				
8.97	0.159	0.000	0.073	0.073	2.65	1.88	0.77	8.31				
9.97	0.218	0.000	0.067	0.067	2.55	1.81	0.75	8.22				
10.97	0.281	0.000	0.060	0.060	2.58	1.87	0.71	8.19	*	0.023	0.187	
11.97	0.325	0.000	0.056	0.056	2.54	1.88	0.66	8.12				
12.97	0.350	0.000	0.053	0.053	2.51	1.88	0.63	8.03				360
13.97	0.368	0.000	0.051	0.051					*	0.023	0.228	
14.97	0.379	0.000	0.049	0.049	2.43	1.84	0.59	7.68				
15.97	0.382	0.000	0.047	0.047	2.41	1.87	0.55	7.61				
16.97	0.378	0.000	0.046	0.046	2.40	1.88	0.52	7.54				
17.97	0.368	0.000	0.043	0.043	2.38	1.88	0.51	7.44				
18.97	0.356	0.000	0.040	0.040	2.31	1.83	0.47	7.27				
19.97	0.342	0.000	0.036	0.036	2.35	1.84	0.51	7.18				
20.97	0.336	0.000	0.036	0.036	2.35	1.88	0.47	7.14				
21.97	0.330	0.000	0.035	0.035	2.37	1.89	0.48	7.10				
22.97	0.326	0.000	0.034	0.034	2.38	1.89	0.49	7.07				
23.97	0.322	0.000	0.034	0.034	2.37	1.89	0.48	7.06				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	6.7	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	2.8	0.00	0.00			
5.97		0.02	1.16			
6.97		0.20	12.80			
7.97	4.4	0.51	42.78			
8.97		0.82	91.36			
9.97		1.08	155.64			
10.97	11.1	1.28	232.04			
11.97		1.40	315.80			
12.97		1.43	401.54			
13.97	14.4	1.35	482.70			
14.97		1.18	553.84			
15.97		0.93	610.14			
16.97	18.3	0.65	649.70			
17.97		0.34	670.72			
18.97		0.09	676.62			
19.97	14.4	0.00	676.80			
20.97		0.00	676.80			
21.97		0.00	676.80			
22.97	7.2	0.00	676.80			
23.97		0.00	676.80			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 4-29-76

MIX, NOX SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.317	0.000	0.034	0.034	2.36	1.91	0.45	7.04				
1.97	0.310	0.000	0.034	0.034	2.35	1.93	0.43	6.97				
2.97	0.308	0.000	0.033	0.033	2.37	1.90	0.48	6.83				
3.97	0.299	0.000	0.032	0.032	2.36	1.91	0.46	6.78				
4.97	0.282	0.000	0.043	0.043	2.38	1.89	0.49	6.77				130
5.97	0.274	0.000	0.037	0.037	2.36	1.91	0.46	6.74				
6.97	0.270	0.000	0.036	0.036	2.35	1.88	0.48	6.72				
7.97	0.263	0.000	0.036	0.036	2.29	1.79	0.50	6.63				
8.97	0.261	0.000	0.036	0.036				6.62				
9.97	0.266	0.000	0.036	0.036	2.39	1.90	0.49	6.70	0.251	0.007	0.022	
10.97	0.281	0.000	0.036	0.036	2.38	1.92	0.46	6.61				
11.97	0.307	0.000	0.035	0.035	2.32	1.87	0.45	6.53				
12.97	0.321	0.000	0.034	0.034	2.33	1.90	0.44	6.45				
13.97	0.336	0.000	0.033	0.033	2.21	1.78	0.44	6.23	0.347	0.006	0.167	
14.97	0.347	0.000	0.031	0.031	2.27	1.87	0.40	6.25				
15.97	0.349	0.000	0.029	0.029	2.28	1.91	0.37	6.20				
16.97	0.342	0.000	0.028	0.028	2.27	1.91	0.35	6.13				
17.97	0.333	0.000	0.026	0.026	2.26	1.91	0.34	6.07				
18.97	0.323	0.000	0.022	0.022	2.26	1.91	0.35	5.97				
19.97	0.313	0.000	0.020	0.020	2.26	1.93	0.34	5.88				
20.97	0.307	0.000	0.019	0.019	2.26	1.91	0.35	5.85				
21.97	0.304	0.000	0.019	0.019	2.27	1.92	0.35	5.82				
22.97	0.301	0.000	0.019	0.019	2.28	1.91	0.36	5.81				
23.97	0.296	0.000	0.018	0.018	2.27	1.93	0.34	5.78				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	7.2	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	3.3	0.00	0.00			
5.97		0.01	0.58			
6.97		0.20	12.20			
7.97	7.2	0.51	42.18			
8.97		0.81	90.18			
9.97		1.07	153.86			
10.97	13.9	1.27	229.66			
11.97		1.41	313.98			
12.97		1.42	399.16			
13.97	18.3	1.35	480.50			
14.97		1.19	552.02			
15.97		0.89	606.02			
16.97	21.1	0.62	643.76			
17.97		0.23	658.54			
18.97		0.07	662.86			
19.97	15.0	0.00	663.00			
20.97		0.00	663.00			
21.97		0.00	663.00			
22.97	9.4	0.00	663.00			
23.97		0.00	663.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 21.1 CENT

*A second injection took place at sunrise on 29 April 76. Target injection: 0.005 ppm NO_x.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 5 4-30-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.97	0.293	0.000	0.018	0.018	2.27	1.93	0.35	5.76				
1.97	0.288	0.000	0.018	0.018	2.24	1.89	0.35	5.71				
2.97	0.286	0.000	0.018	0.018	2.24	1.90	0.34	5.70				
3.97	0.283	0.000	0.018	0.018	2.24	1.90	0.34	5.69				
4.97	0.281	0.000	0.017	0.017	2.24	1.90	0.34	5.68				120
5.97	0.278	0.000	0.018	0.018	2.25	1.91	0.33	5.69				
6.97	0.274	0.000	0.018	0.018	2.23	1.86	0.36	5.65				
7.97	0.267	0.000	0.018	0.018	2.27	1.93	0.34	5.71				
8.97	0.260	0.000	0.018	0.018	2.26	1.97	0.30	5.73				
9.97	0.250	0.000	0.019	0.019	2.26	1.97	0.29	5.66	0.258	0.005	0.010	
10.97	0.242	0.000	0.019	0.019	2.26	1.98	0.28	5.59				
11.97	0.237	0.000	0.019	0.019	2.18	1.87	0.32	5.45				
12.97	0.231	0.000	0.019	0.019	2.23	1.94	0.29	5.39				
13.97	0.222	0.000	0.018	0.018	2.23	1.94	0.28	5.34	0.204	0.004	0.188	
14.97	0.217	0.000	0.018	0.018	2.23	1.95	0.27	5.31				
15.97	0.211	0.000	0.017	0.017								
16.97												
17.97												
18.97												
19.97												
20.97												
21.97												
22.97												
23.97												

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 20.6 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.97		0.00	0.00			
1.97	10.0	0.00	0.00			
2.97		0.00	0.00			
3.97		0.00	0.00			
4.97	8.3	0.00	0.00			
5.97		0.01	0.58			
6.97		0.07	4.66			
7.97	12.2	0.19	15.82			
8.97		0.35	36.50			
9.97		0.58	70.84			
10.97	18.3	0.55	102.74			
11.97		0.74	146.72			
12.97		0.56	180.68			
13.97	18.3	0.13	189.54			
14.97		0.17	199.46			
15.97		0.28	216.04			
16.97	17.8	0.13	224.14			
17.97		0.05	227.30			
18.97		0.01	227.98			
19.97	16.7	0.00	228.00			
20.97		0.00	228.00			
21.97		0.00	228.00			
22.97	15.6	0.00	228.00			
23.97		0.00	228.00			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 4-28-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.042	0.000	0.006	0.006	1.46	1.39	0.07	0.49				
1.13	0.041	0.000	0.005	0.005	1.39	1.34	0.04	0.45				
2.13	0.039	0.000	0.004	0.004	1.46	1.41	0.06	0.49				
3.13	0.037	0.000	0.004	0.004	1.49	1.44	0.06	0.49				
4.13	0.036	0.000	0.004	0.004	1.51	1.44	0.06	0.51				
5.13	0.000	0.087	0.053	0.140	2.06	1.40	0.66	9.17				210
6.13	0.002	0.082	0.058	0.140	2.33	1.44	0.88	9.18				
7.13	0.018	0.037	0.094	0.132	2.27	1.48	0.79	9.19				
8.13	0.087	0.010	0.107	0.117	2.21	1.47	0.74	9.20				
9.13	0.133	0.005	0.102	0.107	2.20	1.49	0.71	9.20				
10.13	0.188	0.002	0.094	0.096	2.13	1.43	0.70	9.09	*	0.042	0.145	
11.13	0.258	0.000	0.083	0.083	2.15	1.49	0.66	9.13				
12.13	0.333	0.000	0.075	0.075	2.13	1.50	0.63	9.09				
13.13	0.390	0.000	0.068	0.068	2.10	1.52	0.58	9.02				230
14.13	0.422	0.000	0.064	0.064	2.03	1.49	0.53	8.79	*	0.028	0.181	
15.13	0.438	0.000	0.062	0.062	2.04	1.50	0.54	8.77				
16.13	0.440	0.000	0.060	0.060	2.01	1.51	0.50	8.74				
17.13	0.433	0.000	0.058	0.058	2.00	1.52	0.48	8.70				
18.13	0.420	0.000	0.053	0.053	2.00	1.55	0.46	8.61				
19.13	0.405	0.000	0.049	0.049	1.94	1.47	0.48	8.40				
20.13	0.393	0.000	0.046	0.046	1.98	1.52	0.46	8.32				
21.13	0.384	0.000	0.045	0.045	2.00	1.55	0.45	8.28				
22.13	0.378	0.000	0.044	0.044	2.01	1.56	0.45	8.23				
23.13	0.373	0.000	0.043	0.043	2.01	1.56	0.45	8.22				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	6.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	2.8	0.00	0.00			
5.13		0.02	0.16			
6.13		0.20	2.80			
7.13	4.4	0.51	17.28			
8.13		0.82	50.36			
9.13		1.08	101.64			
10.13	11.1	1.28	168.04			
11.13		1.40	245.80			
12.13		1.43	330.04			
13.13	14.4	1.35	415.20			
14.13		1.18	494.84			
15.13		0.93	563.64			
16.13	18.3	0.65	617.20			
17.13		0.34	653.72			
18.13		0.09	672.12			
19.13	14.4	0.00	676.80			
20.13		0.00	676.80			
21.13		0.00	676.80			
22.13	7.2	0.00	676.80			
23.13		0.00	676.80			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 65.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO. 68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 4-29-76

MIX, NOX SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.369	0.000	0.043	0.043	2.00	1.58	0.42	8.20				
1.13	0.363	0.000	0.043	0.043	2.00	1.58	0.42	8.14				
2.13	0.351	0.000	0.041	0.041	2.00	1.60	0.40	8.06				
3.13	0.347	0.000	0.041	0.041	2.00	1.58	0.42	7.90				
4.13	0.341	0.000	0.040	0.040	2.02	1.59	0.43	7.85				
5.13	0.326	0.000	0.045	0.045	2.02	1.58	0.44	7.80				150
6.13	0.321	0.000	0.042	0.042	2.02	1.60	0.42	7.79				
7.13	0.316	0.000	0.042	0.042	2.01	1.58	0.43	7.70				
8.13	0.307	0.000	0.043	0.043	1.97	1.56	0.40	7.67				
9.13	0.304	0.000	0.044	0.044	2.01	1.60	0.42	7.71				
10.13	0.307	0.000	0.044	0.044	2.04	1.60	0.44	7.69	0.288	0.011	0.004	
11.13	0.320	0.000	0.043	0.043	2.02	1.62	0.40	7.66				
12.13	0.339	0.000	0.043	0.043	2.00	1.57	0.43	7.59				
13.13	0.358	0.000	0.042	0.042	2.00	1.59	0.41	7.53				
14.13	0.375	0.000	0.041	0.041	1.90	1.49	0.40	7.39	0.335	0.007	0.053	
15.13	0.388	0.000	0.040	0.040	1.95	1.58	0.37	7.41				
16.13	0.389	0.000	0.037	0.037	1.97	1.62	0.35	7.41				
17.13	0.384	0.000	0.035	0.035	1.95	1.63	0.32	7.38				
18.13	0.373	0.000	0.032	0.032	1.95	1.63	0.32	7.32				
19.13	0.359	0.000	0.028	0.028	1.96	1.63	0.33	7.18				
20.13	0.352	0.000	0.027	0.027	1.95	1.64	0.31	7.09				
21.13	0.347	0.000	0.026	0.026	1.96	1.64	0.32	7.05				
22.13	0.341	0.000	0.026	0.026	1.98	1.65	0.33	7.00				
23.13	0.337	0.000	0.026	0.026	1.99	1.65	0.34	7.00				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	7.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.3	0.00	0.00			
5.13		0.01	0.08			
6.13		0.20	2.20			
7.13	7.2	0.51	16.68			
8.13		0.81	49.68			
9.13		1.07	100.36			
10.13	13.9	1.27	166.16			
11.13		1.41	243.48			
12.13		1.42	328.16			
13.13	18.3	1.35	412.80			
14.13		1.19	492.52			
15.13		0.89	561.52			
16.13	21.1	0.62	612.76			
17.13		0.23	646.84			
18.13		0.07	659.56			
19.13	15.0	0.00	663.00			
20.13		0.00	663.00			
21.13		0.00	663.00			
22.13	9.4	0.00	663.00			
23.13		0.00	663.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 70.0 CENT

*A second injection took place at sunrise on 29 April 76. Target injection: .005 ppm NO_x.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 4-30-76

MIX, VOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.332	0.000	0.025	0.025	1.99	1.66	0.33	6.98				
1.13	0.325	0.000	0.024	0.024	1.98	1.67	0.32	6.92				
2.13	0.321	0.000	0.024	0.024	1.96	1.63	0.33	6.87				
3.13	0.317	0.000	0.024	0.024	1.96	1.63	0.33	6.85				
4.13	0.313	0.000	0.024	0.024	1.96	1.64	0.32	6.85				
5.13	0.306	0.000	0.024	0.024	1.95	1.65	0.30	6.82				170
6.13	0.301	0.000	0.024	0.024	1.96	1.66	0.30	6.80				
7.13	0.295	0.000	0.024	0.024	1.96	1.62	0.34	6.80				
8.13	0.290	0.000	0.024	0.024	1.97	1.68	0.30	6.84				
9.13	0.282	0.000	0.025	0.025	1.97	1.70	0.27	6.84				
10.13	0.275	0.000	0.025	0.025	1.97	1.72	0.26	6.84	0.269	0.005	0.072	
11.13	0.268	0.000	0.025	0.025	1.97	1.71	0.26	6.77				
12.13	0.270	0.000	0.025	0.025	1.92	1.64	0.29	6.69				
13.13	0.264	0.000	0.024	0.024	1.96	1.69	0.27	6.68				
14.13	0.256	0.000	0.022	0.022	1.96	1.70	0.25	6.63	0.230	0.005	*	
15.13	0.250	0.000	0.021	0.021	1.95	1.72	0.23	6.59				
16.13	0.242	0.000	0.021	0.021								
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	10.0	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	8.3	0.00	0.00			
5.13		0.01	0.08			
6.13		0.07	1.16			
7.13	12.2	0.19	6.32			
8.13		0.35	19.00			
9.13		0.58	41.84			
10.13	18.3	0.53	76.24			
11.13		0.74	109.72			
12.13		0.56	152.68			
13.13	18.3	0.15	182.84			
14.13		0.17	190.96			
15.13		0.28	202.04			
16.13	17.8	0.13	217.64			
17.13		0.05	224.80			
18.13		0.01	227.48			
19.13	16.7	0.00	228.00			
20.13		0.00	228.00			
21.13		0.00	228.00			
22.13	15.6	0.00	228.00			
23.13		0.00	228.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 69.0 CENT

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 5 4-28-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.001	0.000	0.001	0.001	1.54	1.50	0.04	0.43				
1.30	0.000	0.000	0.001	0.001	1.21	1.20	0.01	0.39				
2.30	0.000	0.000	0.001	0.001	1.10	1.08	0.02	0.45				
3.30	0.000	0.000	0.001	0.001	0.76	0.76	0.01	0.49				
4.30	0.000	0.000	0.001	0.001	0.61	0.61	0.01	0.47				200
5.30	0.000	0.083	0.019	0.103	1.14	0.54	0.60	8.65				
6.30	0.001	0.076	0.024	0.099	1.53	0.61	0.92	8.65				
7.30	0.028	0.018	0.076	0.094	1.48	0.63	0.85	8.64				
8.30	0.125	0.002	0.077	0.079	1.39	0.63	0.75	8.62				
9.30	0.175	0.001	0.068	0.070	1.38	0.65	0.73	8.55				
10.30	0.241	0.000	0.062	0.062	1.33	0.63	0.70	8.39	*	0.027	0.137	
11.30	0.295	0.000	0.058	0.058	1.35	0.70	0.66	8.26				
12.30	0.327	0.000	0.055	0.055	1.35	0.73	0.63	8.09				178
13.30	0.348	0.000	0.052	0.052	1.34	0.76	0.58	7.96				
14.30	0.361	0.000	0.050	0.050	1.31	0.78	0.53	7.67	*	0.025	0.231	
15.30	0.368	0.000	0.047	0.047	1.32	0.79	0.52	7.51				
16.30	0.368	0.000	0.045	0.045	1.32	0.82	0.49	7.38				
17.30	0.358	0.000	0.044	0.044	1.33	0.86	0.47	7.24				
18.30	0.345	0.000	0.041	0.041	1.35	0.90	0.45	7.06				
19.30	0.332	0.000	0.036	0.036	1.30	0.86	0.44	6.83				
20.30	0.322	0.000	0.034	0.034	1.35	0.92	0.43	6.73				
21.30	0.314	0.000	0.033	0.033	1.36	0.95	0.41	6.69				
22.30	0.308	0.000	0.032	0.032	1.39	0.95	0.44	6.65				
23.30	0.303	0.000	0.032	0.032	1.40	0.98	0.42	6.61				

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 65.0 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	6.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	2.8	0.00	0.00			
5.30		0.02	0.36			
6.30		0.20	4.80			
7.30	4.4	0.51	22.38			
8.30		0.82	58.56			
9.30		1.08	112.44			
10.30	11.1	1.28	180.84			
11.30		1.40	259.80			
12.30		1.43	344.34			
13.30	14.4	1.35	428.70			
14.30		1.18	506.64			
15.30		0.93	572.94			
16.30	18.3	0.65	623.70			
17.30		0.34	657.12			
18.30		0.09	673.02			
19.30	14.4	0.00	676.80			
20.30		0.00	676.80			
21.30		0.00	676.80			
22.30	7.2	0.00	676.80			
23.30		0.00	676.80			

*Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 4-29-76

MIX, VOX SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	VRKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.299	0.000	0.032	0.032	1.40	0.99	0.41	6.60				
1.30	0.293	0.000	0.032	0.032	1.40	1.01	0.40	6.52				
2.30	0.284	0.000	0.030	0.030	1.41	1.04	0.37	6.44				
3.30	0.279	0.000	0.030	0.030	1.44	1.05	0.39	6.31				
4.30	0.274	0.000	0.029	0.029	1.44	1.05	0.39	6.25				
5.30	0.256	0.000	0.036	0.036	1.44	1.06	0.38	6.22				
6.30	0.250	0.000	0.033	0.033	1.44	1.07	0.38	6.19				200
7.30	0.247	0.000	0.033	0.033	1.43	1.04	0.39	6.13				
8.30	0.245	0.000	0.033	0.033	1.41	1.01	0.41	6.12				
9.30	0.247	0.000	0.033	0.033	1.46	1.07	0.39	6.13				
10.30	0.257	0.000	0.033	0.033	1.48	1.11	0.37	6.06	0.198	0.010	0.015	
11.30	0.270	0.000	0.032	0.032	1.46	1.12	0.35	5.95				
12.30	0.286	0.000	0.032	0.032	1.46	1.10	0.36	5.76				
13.30	0.303	0.000	0.030	0.030	1.44	1.11	0.33	5.63				
14.30	0.312	0.000	0.028	0.028	1.40	1.06	0.34	5.46	0.285	0.006	0.034	
15.30	0.322	0.000	0.028	0.028	1.45	1.16	0.30	5.40				
16.30	0.320	0.000	0.026	0.026	1.46	1.19	0.27	5.30				
17.30	0.311	0.000	0.024	0.024	1.47	1.21	0.26	5.17				
18.30	0.302	0.000	0.021	0.021	1.49	1.24	0.25	5.10				
19.30	0.291	0.000	0.018	0.018	1.49	1.25	0.24	4.95				
20.30	0.284	0.000	0.017	0.017	1.52	1.27	0.25	4.92				
21.30	0.280	0.000	0.017	0.017	1.51	1.28	0.23	4.90				
22.30	0.275	0.000	0.017	0.017	1.52	1.30	0.23	4.83				
23.30	0.271	0.000	0.017	0.017	1.52	1.30	0.22	4.80				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	7.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	5.3	0.00	0.00			
5.30		0.01	0.18			
6.30		0.20	4.20			
7.30	7.2	0.51	21.78			
8.30		0.81	57.78			
9.30		1.07	111.06			
10.30	13.9	1.27	178.86			
11.30		1.41	257.58			
12.30		1.42	342.36			
13.30	18.3	1.35	426.30			
14.30		1.19	504.42			
15.30		0.89	570.42			
16.30	21.1	0.62	618.96			
17.30		0.23	649.14			
18.30		0.07	660.06			
19.30	15.0	0.00	663.00			
20.30		0.00	663.00			
21.30		0.00	663.00			
22.30	9.4	0.00	663.00			
23.30		0.00	663.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 70.0 CENT

*A second injection took place at sunrise on 29 April 76. Target injection: 0.005 ppm NO_x.

CHAMBER NUMBER 3
DAY 3 OF 3 4-30-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.263	0.000	0.017	0.017	1.54	1.31	0.23	4.78				
1.30	0.258	0.000	0.016	0.016	1.55	1.31	0.24	4.75				
2.30	0.253	0.000	0.016	0.016	1.54	1.29	0.25	4.71				
3.30	0.250	0.000	0.015	0.015	1.54	1.30	0.24	4.66				
4.30	0.246	0.000	0.016	0.016	1.53	1.31	0.23	4.64				
5.30	0.241	0.000	0.016	0.016	1.54	1.32	0.21	4.63				180
6.30	0.238	0.000	0.016	0.016	1.51	1.31	0.20	4.58				
7.30	0.234	0.000	0.016	0.016	1.54	1.31	0.23	4.60				
8.30	0.229	0.000	0.016	0.016	1.57	1.35	0.22	4.64				
9.30	0.220	0.000	0.016	0.016	1.56	1.38	0.19	4.60				
10.30	0.214	0.000	0.017	0.017	1.59	1.41	0.17	4.48	0.194	0.004	0.005	
11.30	0.207	0.000	0.017	0.017	1.54	1.39	0.15	4.34				
12.30	0.205	0.000	0.017	0.017	1.57	1.38	0.19	4.16				
13.30	0.196	0.000	0.015	0.015	1.60	1.45	0.15	3.97				
14.30	0.189	0.000	0.015	0.015	1.60	1.47	0.13	3.93	0.134	0.004	0.120	
15.30	0.184	0.000	0.015	0.015	1.60	1.47	0.13	3.87				
16.30	0.178	0.000	0.015	0.015								
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	10.0	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	8.3	0.00	0.00			
5.30		0.01	0.18			
6.30		0.07	1.86			
7.30	12.2	0.19	8.22			
8.30		0.35	22.50			
9.30		0.58	47.64			
10.30	18.3	0.53	81.54			
11.30		0.74	117.12			
12.30		0.56	158.28			
13.30	18.3	0.13	184.14			
14.30		0.17	192.66			
15.30		0.28	204.84			
16.30	17.8	0.13	218.94			
17.30		0.05	225.30			
18.30		0.01	227.58			
19.30	16.7	0.00	228.00			
20.30		0.00	228.00			
21.30		0.00	228.00			
22.30	15.6	0.00	228.00			
23.30		0.00	228.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 69.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 5 4-28-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.001	0.001								
1.47	0.000	0.000	0.001	0.001								
2.47	0.000	0.000	0.001	0.001								
3.47	0.000	0.000	0.001	0.001								
4.47	0.000	0.000	0.001	0.001								
5.47	0.000	0.090	0.018	0.108	0.83	0.48	0.36	7.90				140
6.47	0.001	0.083	0.028	0.111	1.11	0.53	0.57	7.93				
7.47	0.016	0.033	0.068	0.102	1.07	0.58	0.50	7.95				
8.47	0.072	0.011	0.076	0.087	1.00	0.58	0.42	7.93				
9.47	0.095	0.010	0.072	0.081	0.97	0.57	0.41	7.83				
10.47	0.109	0.011	0.068	0.079	0.97	0.54	0.43	7.78	*	0.056	0.093	
11.47	0.132	0.012	0.063	0.075	1.00	0.59	0.41	7.71				
12.47	0.159	0.015	0.058	0.073	1.00	0.61	0.38	7.60				
13.47	0.189	0.015	0.052	0.067	1.00	0.62	0.38	7.51				140
14.47	0.215	0.017	0.047	0.064	0.98	0.61	0.37	7.29	*	0.055	0.248	
15.47	0.231	0.017	0.041	0.058	0.98	0.62	0.36	7.19				
16.47	0.235	0.017	0.037	0.055	0.98	0.62	0.36	7.09				
17.47	0.225	0.015	0.034	0.049	1.00	0.64	0.36	7.04				
18.47	0.211	0.010	0.030	0.040	1.02	0.66	0.36	6.88				
19.47	0.199	0.002	0.026	0.028	0.99	0.57	0.42	6.73				
20.47	0.191	0.000	0.024	0.024	1.04	0.63	0.40	6.67				
21.47	0.186	0.000	0.022	0.022	1.06	0.66	0.40	6.64				
22.47	0.182	0.000	0.021	0.021	1.06	0.67	0.40	6.62				
23.47	0.178	0.000	0.021	0.021	1.08	0.69	0.39	6.65				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	6.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	2.8	0.00	0.00			
5.47		0.02	0.56			
6.47		0.20	6.80			
7.47	4.4	0.51	21.48			
8.47		0.82	66.76			
9.47		1.08	123.24			
10.47	11.1	1.28	193.64			
11.47		1.40	273.60			
12.47		1.43	358.64			
13.47	14.4	1.35	442.20			
14.47		1.18	518.44			
15.47		0.93	582.24			
16.47	18.3	0.65	630.20			
17.47		0.34	660.52			
18.47		0.09	673.92			
19.47	14.4	0.00	676.80			
20.47		0.00	676.80			
21.47		0.00	676.80			
22.47	7.2	0.00	676.80			
23.47		0.00	676.80			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

*Data suspect and discarded.

CHAMBER NUMBER 4
DAY 2 OF 3 4-29-76

MIX, NOX SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.174	0.000	0.021	0.021	1.08	0.69	0.39	6.60				
1.47	0.169	0.000	0.020	0.020	1.08	0.70	0.38	6.58				
2.47	0.164	0.000	0.019	0.019	1.09	0.72	0.37	6.50				
3.47	0.160	0.000	0.019	0.019	1.11	0.73	0.38	6.37				
4.47	0.156	0.000	0.019	0.019	1.11	0.74	0.37	6.33				
5.47	0.142	0.000	0.028	0.028	1.12	0.76	0.36	6.31				110
6.47	0.137	0.000	0.027	0.027	1.11	0.71	0.39	6.25				
7.47	0.135	0.001	0.026	0.027	1.07	0.72	0.35	6.16				
8.47	0.135	0.009	0.026	0.034	1.11	0.71	0.40	6.15				
9.47	0.144	0.011	0.025	0.035	1.15	0.77	0.38	6.15				
10.47	0.159	0.016	0.025	0.041	1.14	0.78	0.36	6.12	0.100	0.008	0.002	
11.47	0.176	0.017	0.024	0.041	1.11	0.78	0.33	5.99				
12.47	0.191	0.019	0.024	0.043	1.12	0.78	0.34	5.93				
13.47	0.205	0.022	0.024	0.046	1.08	0.75	0.33	5.78				
14.47	0.218	0.021	0.024	0.045	1.09	0.74	0.35	5.71	0.179	0.006	0.092	
15.47	0.222	0.022	0.022	0.045	1.13	0.83	0.31	5.71				
16.47	0.219	0.021	0.021	0.043	1.14	0.87	0.27	5.64				
17.47	0.211	0.019	0.020	0.040	1.15	0.89	0.26	5.58				
18.47	0.201	0.012	0.019	0.031	1.17	0.91	0.25	5.48				
19.47	0.191	0.002	0.017	0.019	1.19	0.95	0.24	5.40				
20.47	0.185	0.001	0.015	0.016	1.21	0.96	0.25	5.35				
21.47	0.180	0.000	0.015	0.015	1.22	0.96	0.25	5.33				
22.47	0.176	0.000	0.014	0.014	1.23	0.98	0.25	5.31				
23.47	0.172	0.000	0.013	0.013	1.23	0.97	0.25	5.29				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	7.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.3	0.00	0.00			
5.47		0.01	0.28			
6.47		0.20	6.20			
7.47	7.2	0.51	26.88			
8.47		0.81	65.88			
9.47		1.07	121.76			
10.47	15.9	1.27	191.56			
11.47		1.41	271.68			
12.47		1.42	356.56			
13.47	18.3	1.35	439.80			
14.47		1.19	516.32			
15.47		0.89	579.32			
16.47	21.1	0.62	625.16			
17.47		0.23	651.44			
18.47		0.07	660.76			
19.47	15.0	0.00	665.00			
20.47		0.00	665.00			
21.47		0.00	665.00			
22.47	9.4	0.00	665.00			
23.47		0.00	665.00			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 21.1 CENT

*A second injection took place at sunrise on 29 April 76. Target injection: 0.005 ppm NO_x.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 4-30-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.168	0.000	0.013	0.013	1.25	1.00	0.22	5.28				
1.47	0.164	0.000	0.013	0.013	1.23	1.01	0.22	5.26				
2.47	0.160	0.000	0.013	0.013	1.25	0.99	0.24	5.21				
3.47	0.157	0.000	0.013	0.013	1.22	1.00	0.22	5.19				
4.47	0.155	0.000	0.013	0.013	1.25	1.00	0.22	5.18				
5.47	0.153	0.000	0.013	0.013	1.24	1.02	0.23	5.19				140
6.47	0.149	0.000	0.013	0.013	1.15	0.96	0.19	5.09				
7.47	0.145	0.002	0.013	0.015	1.23	1.01	0.23	5.16				
8.47	0.141	0.009	0.014	0.022	1.27	1.04	0.23	5.18				
9.47	0.135	0.013	0.015	0.028	1.27	1.05	0.21	5.17				
10.47	0.132	0.015	0.015	0.030	1.27	1.07	0.20	5.14	0.115	0.003	0.043	
11.47	0.128	0.018	0.015	0.033	1.20	0.99	0.21	4.96				
12.47	0.129	0.017	0.016	0.033	1.26	1.03	0.22	4.93				
13.47	0.121	0.010	0.015	0.025	1.27	1.09	0.18	4.86				
14.47	0.114	0.013	0.015	0.028	1.27	1.09	0.18	4.81	0.071	0.004	0.219	
15.47	0.109	0.011	0.014	0.025	1.27	1.12	0.16	4.75				
16.47	0.103	0.013	0.014	0.027								
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	10.0	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	8.3	0.00	0.00			
5.47		0.01	0.28			
6.47		0.07	2.56			
7.47	12.2	0.19	10.12			
8.47		0.35	26.00			
9.47		0.58	53.44			
10.47	18.3	0.53	86.84			
11.47		0.74	124.52			
12.47		0.56	163.88			
13.47	18.3	0.13	185.44			
14.47		0.17	194.36			
15.47		0.28	207.64			
16.47	17.8	0.13	220.24			
17.47		0.05	225.80			
18.47		0.01	227.68			
19.47	16.7	0.00	228.00			
20.47		0.00	228.00			
21.47		0.00	228.00			
22.47	15.6	0.00	228.00			
23.47		0.00	228.00			

% POSSIBLE MINUTES OF SUNSHINE 4

RDU AIRPORT MAXIMUM TEMPERATURE 20.6 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 5- 6-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.001	0.001								
1.13	0.000	0.000	0.001	0.001								
2.13	0.000	0.000	0.001	0.001								
3.13	0.000	0.000	0.001	0.001								
4.13	0.000	0.000	0.091	0.001	0.84	0.79	0.05	0.17				0
5.13	0.000	0.380	0.019	0.399	2.06	0.92	1.14	*				
6.13	0.000	0.373	0.025	0.398	1.85	0.83	1.02	8.29				
7.13	0.000	0.347	0.050	0.397	1.89	0.80	1.09	8.30				
8.13	0.000	0.251	0.137	0.388	1.86	0.81	1.04	8.27				
9.13	0.011	0.112	0.250	0.365					8	0.226	0.087	
10.13	0.044	0.035	0.294	0.329	1.77	0.91	0.87	8.03				
11.13	0.096	0.012	0.286	0.297	1.81	0.95	0.87	7.94				
12.13	0.168	0.001	0.263	0.264	1.80	0.99	0.81	7.86				
13.13	0.236	0.000	0.255	0.233	1.75	0.97	0.78	7.63				
14.13	0.302	0.000	0.201	0.201	1.79	1.01	0.79	7.53				
15.13	0.355	0.000	0.171	0.171	1.76	1.06	0.70	7.41	0.314	0.111	*	
16.13	0.389	0.000	0.145	0.145	1.75	1.08	0.67	7.26				
17.13	0.391	0.000	0.121	0.121	1.70	1.09	0.60	7.07				
18.13	0.375	0.000	0.095	0.095	1.69	1.10	0.59	6.97				
19.13	0.344	0.000	0.057	0.057	1.69	1.10	0.59	6.85				
20.13	0.323	0.000	0.040	0.040	1.69	1.11	0.58	6.69				
21.13	0.314	0.000	0.036	0.036	1.68	1.11	0.57	6.67				
22.13	0.305	0.000	0.034	0.034	1.71	1.12	0.59	6.54				
23.13	0.295	0.000	0.033	0.033	1.72	1.15	0.57	6.47				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	15.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	13.9	0.00	0.00			
5.13		0.02	0.16			
6.13		0.19	2.72			
7.13	16.1	0.47	16.56			
8.13		0.69	46.52			
9.13		1.02	90.36			
10.13	22.2	1.04	151.72			
11.13		1.29	216.12			
12.13		1.30	293.60			
13.13	25.0	1.33	371.84			
14.13		1.02	449.16			
15.13		0.87	509.16			
16.13	26.1	0.54	558.72			
17.13		0.31	589.28			
18.13		0.05	605.80			
19.13	22.8	0.00	608.40			
20.13		0.00	608.40			
21.13		0.00	608.40			
22.13	21.1	0.00	608.40			
23.13		0.00	608.40			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 5- 7-76

MIX, NOX SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.287	0.000	0.031	0.031	1.73	1.15	0.57	6.32				
1.13	0.278	0.000	0.030	0.030	1.71	1.18	0.54	6.25				
2.13	0.271	0.000	0.029	0.029	1.59	1.18	0.41	6.28				
3.13	0.266	0.000	0.028	0.028	1.71	1.20	0.51	6.29				0
4.13	0.259	0.000	0.028	0.028	1.70	1.20	0.50	6.19				
5.13	0.246	0.000	0.030	0.030	1.70	1.21	0.50	6.11				
6.13	0.238	0.000	0.028	0.028	1.61	1.14	0.46	6.06				
7.13	0.233	0.000	0.028	0.028	1.60	1.16	0.44	6.16				
8.13	0.225	0.000	0.027	0.027	1.73	1.20	0.53	6.08				
9.13	0.216	0.000	0.027	0.027	1.74	1.20	0.54	5.98	0.293	0.005	0.162	
10.13	0.210	0.000	0.027	0.027	1.73	1.20	0.52	5.92				
11.13	0.213	0.000	0.028	0.028	1.64	1.14	0.49	5.88				
12.13	0.244	0.000	0.028	0.028	1.70	1.24	0.46	5.83				
13.13	0.268	0.000	0.028	0.028	1.71	1.23	0.48	5.73				0
14.13	0.289	0.000	0.028	0.028					0.286	0.005	**	
15.13	0.296	0.000	0.026	0.026	1.72	1.30	0.41	5.57				
16.13	0.296	0.000	0.026	0.026	1.70	1.30	0.40	5.65				
17.13	0.289	0.000	0.025	0.025	1.70	1.31	0.39	5.58				
18.13	0.278	0.000	0.024	0.024	1.65	1.27	0.38	5.51				
19.13	0.267	0.000	0.020	0.020	1.69	1.22	0.47	5.37				
20.13	0.259	0.000	0.018	0.018	1.70	1.27	0.43	5.36				
21.13	0.252	0.000	0.018	0.018	1.72	1.32	0.40	5.30				
22.13	0.246	0.000	0.017	0.017	1.73	1.32	0.40	5.20				
23.13	0.241	0.000	0.017	0.017	1.73	1.33	0.39	5.15				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	17.2	0.00	0.00			
5.13		0.00	0.00			
6.13		0.02	0.16			
7.13	17.8	0.09	1.92			
8.13		0.12	7.56			
9.13		0.18	15.24			
10.13	19.4	0.46	28.28			
11.13		1.17	61.56			
12.13		1.10	131.20			
13.13	24.4	1.05	196.80			
14.13		0.84	258.12			
15.13		0.61	306.68			
16.13	25.0	0.43	341.84			
17.13		0.19	365.72			
18.13		0.05	376.00			
19.13	22.2	0.00	378.60			
20.13		0.00	378.60			
21.13		0.00	378.60			
22.13	20.0	0.00	378.60			
23.13		0.00				

% POSSIBLE MINUTES OF SUNSHINE 39

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* A second reactant injection took place @ 0400 EST, 7 May 1976. The target injection was 0.005 ppm NO_x.

** Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 5 5- 8-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.235	0.000	0.017	0.017	1.73	1.33	0.40	5.10				
1.13	0.227	0.000	0.016	0.016	1.73	1.34	0.39	4.94				
2.13	0.217	0.000	0.015	0.015	1.73	1.34	0.39	4.88				
3.13	0.207	0.000	0.015	0.015								
4.13	0.194	0.000	0.015	0.015	1.72	1.38	0.34	4.94				
5.13	0.183	0.000	0.013	0.013	1.72	1.38	0.34	4.76				
6.13	0.173	0.000	0.013	0.013	1.72	1.38	0.34	4.71				
7.13	0.163	0.000	0.013	0.013	1.62	1.29	0.33	4.52				
8.13	0.152	0.000	0.012	0.012	1.72	1.34	0.38	4.54	0.139	0.003	0.000	
9.13	0.141	0.000	0.013	0.013								
10.13	0.132	0.000	0.015	0.015	1.65	1.38	0.27	4.59				
11.13	0.139	0.000	0.017	0.017	1.65	1.37	0.28	4.49				
12.13	0.143	0.000	0.019	0.019	1.63	1.38	0.25	4.52				
13.13	0.151	0.000	0.019	0.019	1.57	1.34	0.23	4.41				
14.13	0.157	0.001	0.020	0.021	1.61	1.37	0.24	4.41				
15.13	0.156	0.002	0.021	0.024	1.61	1.37	0.24	4.34	0.157	0.002	0.000	
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.02	0.16			
7.13	11.1	0.10	2.00			
8.13		0.14	8.52			
9.13		0.36	18.48			
10.13	11.1	0.85	44.00			
11.13		0.78	94.44			
12.13		0.92	142.56			
13.13	17.2	0.72	195.96			
14.13		0.61	238.28			
15.13		0.37	272.96			
16.13	15.6	0.19	293.72			
17.13		0.15	304.80			
18.13		0.07	313.16			
19.13	13.9	0.01	316.88			
20.13		0.00	317.40			
21.13		0.00	317.40			
22.13	7.2	0.00	317.40			
23.13		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 17

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 5- 6-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.006	0.000	0.002	0.002								
1.30	0.006	0.000	0.001	0.001								
2.30	0.005	0.000	0.001	0.001								
3.30	0.005	0.000	0.001	0.001								
4.30	0.005	0.001	0.021	0.022	1.15	1.09	0.06	9.23				0
5.30	0.000	0.447	0.022	0.470	2.65	1.19	1.45	*				
6.30	0.000	0.434	0.027	0.461	2.59	1.15	1.44	8.99				
7.30	0.000	0.375	0.092	0.467	2.48	1.09	1.40	9.08				
8.30	0.002	0.197	0.247	0.444	2.40	1.14	1.26	9.04				
9.30	0.045	0.060	0.342	0.402	2.39	1.21	1.18	8.99	*	0.302	0.178	
10.30	0.101	0.022	0.345	0.368	2.28	1.18	1.10	8.90				
11.30	0.187	0.006	0.321	0.327	2.32	1.25	1.07	8.93				
12.30	0.289	0.000	0.284	0.284	2.29	1.28	1.01	8.86				
13.30	0.386	0.000	0.242	0.242	2.17	1.20	0.97	8.70				
14.30	0.471	0.000	0.202	0.202	2.22	1.28	0.94	8.69				
15.30	0.538	0.000	0.161	0.161	2.18	1.31	0.86	8.63	0.490	0.085	*	
16.30	0.578	0.000	0.134	0.134	2.14	1.32	0.81	8.54				
17.30	0.567	0.000	0.104	0.104	2.08	1.30	0.78	8.34				
18.30	0.544	0.000	0.082	0.082	2.06	1.31	0.75	8.26				
19.30	0.515	0.000	0.064	0.064	2.05	1.31	0.74	8.09				
20.30	0.501	0.000	0.059	0.059	2.05	1.32	0.73	7.99				
21.30	0.490	0.000	0.058	0.058	2.00	1.31	0.69	7.91				
22.30	0.475	0.000	0.055	0.055	2.05	1.33	0.71	7.80				
23.30	0.461	0.000	0.051	0.051	2.04	1.35	0.69	7.72				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	15.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.9	0.00	0.00			
5.30		0.02	0.36			
6.30		0.19	4.62			
7.30	16.1	0.47	21.06			
8.30		0.69	55.22			
9.30		1.02	100.56			
10.30	22.2	1.04	162.12			
11.30		1.29	229.02			
12.30		1.30	306.60			
13.30	25.0	1.33	385.14			
14.30		1.02	459.36			
15.30		0.87	517.86			
16.30	26.1	0.54	564.12			
17.30		0.31	592.38			
18.30		0.05	606.30			
19.30	22.8	0.00	608.40			
20.30		0.00	608.40			
21.30		0.00	608.40			
22.30	21.1	0.00	608.40			
23.30		0.00	608.40			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* Data suspect and discarded.

CHAMBER NUMBER 2
DAY 2 OF 5 5- 7-76

MIX, NOX SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.449	0.000	0.049	0.049	2.03	1.36	0.67	7.62				
1.30	0.440	0.000	0.047	0.047	2.02	1.36	0.66	7.52				
2.30	0.430	0.000	0.046	0.046	2.00	1.37	0.63	7.57				
3.30	0.425	0.000	0.045	0.045	1.95	1.38	0.57	7.55				
4.30	0.405	0.000	0.050	0.050	1.99	1.39	0.60	7.50				180
5.30	0.396	0.000	0.046	0.046	1.98	1.38	0.60	7.38				
6.30	0.385	0.000	0.043	0.043	1.88	1.30	0.59	7.37				
7.30	0.375	0.000	0.042	0.042	2.02	1.36	0.66	7.44				
8.30	0.364	0.000	0.040	0.040	2.00	1.38	0.62	7.35				
9.30	0.351	0.000	0.039	0.039	1.98	1.39	0.58	7.25		0.006	0.260	
10.30	0.337	0.001	0.037	0.039	1.96	1.39	0.57	7.18				
11.30	0.330	0.004	0.039	0.043	1.85	1.30	0.55	7.12				
12.30	0.350	0.007	0.039	0.046	1.92	1.35	0.57	7.09				
13.30	0.364	0.010	0.039	0.048	1.91	1.38	0.53	7.06				100
14.30	0.378	0.012	0.037	0.049					**	0.007	**	
15.30	0.378	0.013	0.036	0.049	1.91	1.42	0.49	7.20				
16.30	0.371	0.013	0.035	0.048	1.90	1.43	0.47	7.15				
17.30	0.356	0.012	0.033	0.045	1.89	1.43	0.45	7.05				
18.30	0.340	0.007	0.029	0.036	1.80	1.35	0.45	6.93				
19.30	0.322	0.005	0.026	0.031	1.86	1.37	0.49	6.83				
20.30	0.307	0.004	0.024	0.028	1.88	1.42	0.46	6.79				
21.30	0.290	0.004	0.022	0.027	1.88	1.44	0.44	6.70				
22.30	0.277	0.004	0.021	0.026	1.88	1.44	0.44	6.64				
23.30	0.264	0.004	0.020	0.025	1.88	1.45	0.43	6.60				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	17.2	0.00	0.00			
5.30		0.00	0.00			
6.30		0.02	0.36			
7.30	17.8	0.09	2.82			
8.30		0.12	8.76			
9.30		0.18	17.04			
10.30	19.4	0.46	32.88			
11.30		1.17	75.26			
12.30		1.10	142.20			
13.30	24.4	1.05	207.30			
14.30		0.84	266.52			
15.30		0.61	312.78			
16.30	25.0	0.43	346.14			
17.30		0.19	367.62			
18.30		0.05	376.50			
19.30	22.2	0.00	378.60			
20.30		0.00	378.60			
21.30		0.00	378.60			
22.30	20.0	0.00	378.60			
23.30		0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 39

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* A second reactant injection took place at 0400 EST, 7 May 1976. The target injection was 0.010 ppm NO_x.

** Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 5 5- 8-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.248	0.002	0.019	0.021	1.88	1.46	0.41	6.56				
1.30	0.236	0.001	0.018	0.019	1.85	1.46	0.39	6.32				
2.30	0.225	0.000	0.017	0.017	1.85	1.48	0.37	6.28				
3.30	0.211	0.000	0.017	0.017	1.85	1.48	0.37	6.49				
4.30	0.197	0.000	0.017	0.017	1.85	1.48	0.36	6.34				
5.30	0.187	0.000	0.016	0.016	1.82	1.49	0.34	6.09				
6.30	0.181	0.000	0.016	0.016	1.82	1.50	0.32	5.99				
7.30	0.171	0.000	0.016	0.016	1.71	1.38	0.33	5.78				
8.30	0.160	0.000	0.016	0.016	1.80	1.47	0.34	5.80	0.130	0.003	*	
9.30	0.150	0.000	0.017	0.017	1.76	1.49	0.26	6.02				
10.30	0.140	0.000	0.020	0.020	1.72	1.49	0.22	5.92				
11.30	0.145	0.000	0.025	0.025	1.69	1.50	0.19	5.81				
12.30	0.149	0.001	0.026	0.027	1.69	1.48	0.21	5.78				
13.30	0.155	0.001	0.026	0.027	1.61	1.43	0.18	5.67				
14.30	0.158	0.002	0.026	0.028	1.67	1.46	0.21	5.59				
15.30	0.155	0.003	0.026	0.029	1.65	1.47	0.18	5.54	0.148	0.005	*	
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.6	0.00	0.00			
5.30		0.00	0.00			
6.30		0.02	0.36			
7.30	11.1	0.10	3.00			
8.30		0.14	9.72			
9.30		0.36	22.08			
10.30	11.1	0.65	52.50			
11.30		0.78	102.24			
12.30		0.92	151.56			
13.30	17.2	0.72	203.16			
14.30		0.61	244.38			
15.30		0.37	276.66			
16.30	15.6	0.19	295.62			
17.30		0.15	306.50			
18.30		0.07	313.86			
19.30	13.9	0.01	316.98			
20.30		0.00	317.40			
21.30		0.00	317.40			
22.30	7.2	0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 17

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 5- 6-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.001	0.001								
1.47	0.000	0.000	0.001	0.001								
2.47	0.000	0.000	0.000	0.000								
3.47	0.000	0.000	0.000	0.000	0.63	0.62	0.00	0.19				
4.47	0.000	0.150	0.019	0.169	0.98	0.48	0.51	8.74				0
5.47	0.000	0.139	0.022	0.161	*	0.66		*				
6.47	0.000	0.109	0.049	0.158	2.08	0.54	1.55	8.54				
7.47	0.148	0.000	0.139	0.139	1.80	0.50	1.30	8.55				
8.47	0.234	0.000	0.122	0.122	1.81	0.58	1.22	8.46				
9.47	0.348	0.000	0.108	0.108	*	0.69		8.27	0.367	0.026	0.165	
10.47	0.428	0.000	0.093	0.093	1.76	0.67	1.09	7.89				
11.47	0.493	0.000	0.084	0.084	1.77	0.78	0.99	7.78				
12.47	0.536	0.000	0.076	0.076	1.75	0.85	0.90	7.50				
13.47	0.556	0.000	0.068	0.068	1.64	0.78	0.86	7.10				
14.47	0.566	0.000	0.061	0.061	1.72	0.91	0.81	6.85				
15.47	0.558	0.000	0.055	0.055	1.72	0.98	0.74	6.61	0.504	0.017	*	
16.47	0.540	0.000	0.049	0.049	1.69	1.02	0.68	6.33				
17.47	0.512	0.000	0.044	0.044	1.64	1.03	0.61	6.03				
18.47	0.487	0.000	0.039	0.039	1.66	1.07	0.59	5.80				
19.47	0.464	0.000	0.034	0.034	1.64	1.08	0.56	5.62				
20.47	0.452	0.000	0.032	0.032	1.65	1.09	0.56	5.52				
21.47	0.440	0.000	0.031	0.031	1.62	1.09	0.53	5.41				
22.47	0.420	0.000	0.028	0.028	1.65	1.14	0.51	5.23				
23.47	0.399	0.000	0.026	0.026	1.65	1.17	0.48	5.07				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	15.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	13.9	0.00	0.00			
5.47		0.02	0.56			
6.47		0.19	6.52			
7.47	16.1	0.47	25.76			
8.47		0.69	60.12			
9.47		1.02	110.76			
10.47	22.2	1.04	172.52			
11.47		1.29	241.92			
12.47		1.30	319.60			
13.47	25.0	1.33	398.44			
14.47		1.02	469.56			
15.47		0.87	526.56			
16.47	26.1	0.54	569.52			
17.47		0.31	595.48			
18.47		0.05	606.80			
19.47	22.8	0.00	608.40			
20.47		0.00	608.40			
21.47		0.00	608.40			
22.47	21.1	0.00	608.40			
23.47		0.00	608.40			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 5- 7-76

MIX, NOX SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.385	0.000	0.025	0.025	1.65	1.20	0.45	4.87				
1.47	0.372	0.000	0.022	0.022	1.64	1.21	0.43	4.70				
2.47	0.358	0.000	0.024	0.024	1.63	1.24	0.39	4.63				
3.47	0.351	0.000	0.020	0.020	1.63	1.25	0.38	4.55				
4.47	0.321	0.000	0.032	0.032	1.63	1.26	0.37	4.50				160
5.47	0.310	0.000	0.024	0.024	1.62	1.27	0.34	4.38				
6.47	0.299	0.000	0.021	0.021	1.56	1.19	0.38	4.32				
7.47	0.290	0.000	0.020	0.020	1.65	1.26	0.40	4.32				
8.47	0.278	0.000	0.019	0.019	1.65	1.30	0.35	4.21				
9.47	0.266	0.000	0.019	0.019	1.64	1.31	0.33	4.10	**	0.006	0.166	
10.47	0.255	0.000	0.018	0.018	1.58	1.33	0.25	4.02				
11.47	0.250	0.000	0.020	0.020	1.56	1.23	0.33	3.92				
12.47	0.263	0.001	0.020	0.021	1.62	1.32	0.30	3.83				
13.47	0.266	0.002	0.019	0.021	1.62	1.36	0.26	3.68				100
14.47	0.272	0.003	0.018	0.021	1.70	1.39	0.31	3.73	**	0.006	**	
15.47	0.268	0.004	0.018	0.022	1.64	1.43	0.21	5.79				
16.47	0.263	0.003	0.017	0.020	1.65	1.44	0.20	3.55				
17.47	0.253	0.003	0.017	0.020	1.64	1.43	0.21	3.47				
18.47	0.244	0.003	0.015	0.018	1.52	1.33	0.20	3.31				
19.47	0.235	0.003	0.014	0.017	1.63	1.39	0.24	3.28				
20.47	0.226	0.003	0.013	0.016	1.62	1.43	0.19	3.24				
21.47	0.215	0.003	0.013	0.016	1.63	1.44	0.19	3.22				
22.47	0.206	0.003	0.013	0.016	1.64	1.46	0.18	3.13				
23.47	0.197	0.002	0.012	0.014	1.63	1.43	0.20	3.04				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	17.2	0.00	0.00			
5.47		0.00	0.00			
6.47		0.02	0.56			
7.47	17.8	0.09	3.72			
8.47		0.12	9.96			
9.47		0.18	18.84			
10.47	19.4	0.46	37.48			
11.47		1.17	84.96			
12.47		1.10	153.20			
13.47	24.4	1.05	217.80			
14.47		0.85	275.20			
15.47		0.61	319.48			
16.47	25.0	0.43	351.04			
17.47		0.19	370.12			
18.47		0.05	377.60			
19.47	22.2	0.00	379.20			
20.47		0.00	379.20			
21.47		0.00	379.20			
22.47	20.0	0.00	379.20			
23.47		0.00	379.20			

% POSSIBLE MINUTES OF SUNSHINE 39

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* A second reactant injection took place at 0400 EST., 7 May 1976. The target injection was 0.015 ppm NO_x.

** Data suspect and discarded.

CHAMBER NUMBER 3
DAY 3 OF 3 5- 8-76

MIX, NOX SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.186	0.001	0.012	0.013	1.63	1.48	0.15	3.04				
1.47	0.175	0.001	0.011	0.012	1.60	1.48	0.12	2.93				
2.47	0.164	0.001	0.011	0.012	1.61	1.51	0.10	2.88				
3.47	0.152	0.000	0.010	0.010	1.59	1.52	0.07	2.94				
4.47	0.139	0.000	0.010	0.010	1.59	1.53	0.06	2.84				
5.47	0.132	0.000	0.010	0.010	1.56	1.53	0.03	2.75				
6.47	0.126	0.000	0.009	0.009	1.56	1.53	0.03	2.66				
7.47	0.119	0.000	0.009	0.009	1.51	1.44	0.07	2.57				
8.47	0.110	0.000	0.010	0.010	1.56	1.53	0.03	2.54	*	0.002	*	
9.47	0.106	0.000	0.012	0.012				2.63				
10.47	0.107	0.000	0.015	0.015				2.57				
11.47	0.119	0.000	0.016	0.016				2.55				
12.47	0.128	0.003	0.017	0.020				2.50				
13.47	0.137	0.002	0.017	0.019				2.41				
14.47	0.141	0.003	0.017	0.020				2.39				
15.47	0.140	0.003	0.017	0.020				2.31	*	0.005	*	
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.6	0.00	0.00			
5.47		0.00	0.00			
6.47		0.02	0.56			
7.47	11.1	0.10	4.00			
8.47		0.14	11.12			
9.47		0.36	25.68			
10.47	11.1	0.85	61.00			
11.47		0.78	110.04			
12.47		0.92	160.76			
13.47	17.2	0.72	210.56			
14.47		0.61	250.48			
15.47		0.37	280.36			
16.47	15.6	0.19	297.52			
17.47		0.15	307.80			
18.47		0.07	314.56			
19.47	13.9	0.01	317.08			
20.47		0.00	317.40			
21.47		0.00	317.40			
22.47	7.2	0.00	317.40			
23.47		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 17

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 5- 6-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.000	0.000	0.000								
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.000	0.000	0.000								
3.63	0.000	0.000	0.000	0.000								
4.63	0.000	0.028	0.025	0.052	2.14	0.33	1.81	7.97				
5.63	0.000	0.014	0.032	0.046	*	0.48		*				0
6.63	0.029	0.000	0.047	0.047	2.18	0.38	1.80	7.90				
7.63	0.035	0.000	0.046	0.046	2.01	0.30	1.71	7.90				
8.63	0.049	0.000	0.045	0.045	2.06	0.44	1.62	7.95	*	0.015	0.193	
9.63	0.109	0.000	0.045	0.045	2.09	0.52	1.57	7.86				
10.63	0.164	0.000	0.044	0.044	2.00	0.46	1.54	7.75				
11.63	0.224	0.000	0.043	0.043	1.98	0.55	1.43	7.77				
12.63	0.270	0.000	0.041	0.041	2.02	0.57	1.45	7.61				
13.63	0.307	0.000	0.040	0.040	1.85	0.47	1.38	7.51				
14.63	0.327	0.000	0.039	0.039	1.88	0.58	1.29	7.46	0.290	0.015	*	
15.63	0.335	0.000	0.036	0.036	1.86	0.62	1.24	7.33				
16.63	0.324	0.000	0.035	0.035	1.83	0.64	1.19	7.22				
17.63	0.311	0.000	0.033	0.033	1.78	0.65	1.13	7.05				
18.63	0.296	0.000	0.030	0.030	1.78	0.66	1.12	6.97				
19.63	0.279	0.000	0.028	0.028	1.77	0.68	1.09	6.83				
20.63	0.268	0.000	0.027	0.027	1.77	0.69	1.09	6.73				
21.63	0.258	0.000	0.026	0.026	1.77	0.68	1.08	6.62				
22.63	0.246	0.000	0.024	0.024	1.78	0.74	1.04	6.54				
23.63	0.235	0.000	0.022	0.022	1.78	0.74	1.04	6.38				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	15.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	13.9	0.00	0.00			
5.63		0.02	0.76			
6.63		0.19	8.42			
7.63	16.1	0.47	30.46			
8.63		0.69	67.02			
9.63		1.02	120.96			
10.63	22.2	1.04	182.92			
11.63		1.29	254.82			
12.63		1.30	332.60			
13.63	25.0	1.33	411.74			
14.63		1.02	479.76			
15.63		0.87	535.26			
16.63	26.1	0.54	574.92			
17.63		0.31	598.58			
18.63		0.05	607.30			
19.63	22.8	0.00	608.40			
20.63		0.00	608.40			
21.63		0.00	608.40			
22.63	21.1	0.00	608.40			
23.63		0.00				

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 5- 7-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.226	0.000	0.021	0.021	1.77	0.77	1.00	6.26				
1.63	0.218	0.000	0.020	0.020	1.76	0.79	0.98	6.17				
2.63	0.212	0.000	0.019	0.019	1.74	0.79	0.95	6.16				
3.63	0.204	0.000	0.018	0.018	1.74	0.81	0.93	6.11				
4.50	0.199	0.000	0.019	0.019	1.75	0.82	0.93	6.11				120
5.63	0.193	0.000	0.018	0.018	1.74	0.82	0.92	6.01				
6.63	0.186	0.000	0.018	0.018	1.71	0.75	0.96	5.98				
7.63	0.181	0.000	0.018	0.018	1.77	0.82	0.95	6.00				
8.63	0.171	0.000	0.018	0.018	1.77	0.84	0.93	5.97				
9.63	0.164	0.000	0.018	0.018	1.77	0.85	0.92	5.86	*	0.005	0.144	
10.63	0.160	0.000	0.018	0.018	1.75	0.87	0.88	5.80				
11.63	0.174	0.000	0.021	0.021	1.72	0.78	0.94	5.77				
12.63	0.205	0.000	0.024	0.024	1.72	0.84	0.87	5.78				
13.00	0.226	0.002	0.024	0.026	1.72	0.88	0.84	5.68				100
14.63	0.246	0.000	0.024	0.024	1.75	0.92	0.83	5.87	*	0.006	*	
15.63	0.250	0.000	0.025	0.025	1.73	0.93	0.79	5.80				
16.63	0.247	0.000	0.025	0.025	1.72	0.94	0.78	5.77				
17.63	0.240	0.000	0.024	0.024	1.73	0.94	0.78	5.67				
18.63	0.229	0.000	0.022	0.022	1.61	0.82	0.79	5.53				
19.63	0.220	0.000	0.020	0.020	1.70	0.93	0.78	5.48				
20.63	0.214	0.000	0.018	0.018	1.73	0.91	0.82	5.46				
21.63	0.205	0.000	0.017	0.017	1.73	0.99	0.74	5.36				
22.63	0.201	0.000	0.017	0.017	1.73	1.00	0.73	5.27				
23.63	0.195	0.000	0.017	0.017	1.73	0.99	0.74	5.25				

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.50	17.2	0.00	0.00			
5.63		0.00	0.00			
6.63		0.02	0.76			
7.63	17.8	0.09	4.62			
8.63		0.12	11.16			
9.63		0.18	20.64			
10.63	19.4	0.46	42.08			
11.63		1.17	96.66			
12.63		1.10	164.20			
13.00	24.4	1.05	188.40			
14.63		0.84	283.32			
15.63		0.61	324.98			
16.63	25.0	0.43	354.74			
17.63		0.19	371.42			
18.63		0.05	377.50			
19.63	22.2	0.00	378.60			
20.63		0.00	378.60			
21.63		0.00	378.60			
22.63	20.0	0.00	378.60			
23.63		0.00	378.60			

% POSSIBLE MINUTES OF SUNSHINE 39

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 5- 8-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.190	0.000	0.016	0.016	1.72	1.02	0.69	5.15				
1.63	0.183	0.000	0.016	0.016	1.70	1.02	0.69	5.05				
2.63	0.179	0.000	0.015	0.015	1.72	1.02	0.69	5.01				
3.63	0.171	0.000	0.015	0.015	1.69	1.02	0.66	5.08				
4.63	0.160	0.000	0.014	0.014	1.69	1.04	0.65	4.95				
5.63	0.153	0.000	0.014	0.014	1.67	1.07	0.60	4.82				
6.63	0.145	0.000	0.013	0.013	1.67	1.07	0.61	4.73				
7.63	0.137	0.000	0.013	0.013	1.67	1.00	0.67	4.58	0.112	0.003	*	
8.63	0.128	0.000	0.014	0.014	1.68	1.07	0.61	4.54				
9.63	0.121	0.000	0.015	0.015	1.62	1.07	0.55	4.69				
10.63	0.122	0.000	0.017	0.017	1.60	1.09	0.52	4.62				
11.63	0.136	0.000	0.020	0.020	1.59	1.08	0.51	4.65				
12.63	0.144	0.003	0.024	0.027	1.57	1.09	0.48	4.56				
13.63	0.152	0.003	0.025	0.028	1.57	1.06	0.51	4.48				
14.63	0.159	0.004	0.025	0.029	1.57	1.09	0.49	4.40	0.107	0.004	*	
15.63	0.158	0.003	0.026	0.029	1.56	1.11	0.45	4.37				
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.6	0.00	0.00			
5.63		0.00	0.00			
6.63		0.02	0.76			
7.63	11.1	0.10	5.00			
8.63		0.14	12.52			
9.63		0.36	29.28			
10.63	11.1	0.85	69.50			
11.63		0.78	117.84			
12.63		0.92	169.96			
13.63	17.2	0.72	217.56			
14.63		0.61	256.58			
15.63		0.37	284.06			
16.63	15.6	0.19	299.42			
17.63		0.15	309.30			
18.63		0.07	315.26			
19.63	13.9	0.01	317.18			
20.63		0.00	317.40			
21.63		0.00	317.40			
22.63	7.2	0.00	317.40			
23.63		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 17

RDU AIRPORT MAXIMUM TEMPERATURE 18.3 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8- 4-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.580	0.196	0.775								
1.13	0.000	0.579	0.205	0.784								
2.13	0.000	0.568	0.212	0.780								
3.13	0.000	0.551	0.210	0.760								
4.13	0.000	0.858	0.219	1.077								
5.13	0.000	0.847	0.233	1.080								
6.13	0.000	0.781	0.283	1.064								
7.13	0.000	0.449	0.567	1.016								
8.13	0.020	0.124	0.802	0.926					*	0.710	0.284	
9.13	0.087	0.044	0.791	0.835								
10.13	0.211	0.016	0.711	0.727								
11.13	0.587	0.007	0.588	0.596								
12.13	0.599	0.005	0.455	0.460								
13.13	0.822	0.002	0.328	0.330					*	*	0.230	
14.13	0.989	0.005	0.244	0.249								
15.13	1.053	0.002	0.200	0.202								
16.13	1.048	0.002	0.173	0.175								
17.13	1.012	0.002	0.154	0.156								
18.13	0.965	0.002	0.138	0.140								
19.13	0.921	0.002	0.126	0.128								
20.13	0.872	0.000	0.117	0.117								
21.13	0.836	0.000	0.107	0.107								
22.13	0.807	0.000	0.105	0.105								
23.13	0.786	0.000	0.101	0.101								

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	15.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	15.0	0.00	0.00			
5.13		0.01	0.08			
6.13		0.20	2.20			
7.13	16.7	0.48	16.44			
8.13		0.76	47.48			
9.13		1.02	95.16			
10.13	24.8	1.22	157.96			
11.13		1.34	232.12			
12.13		1.38	312.84			
13.13	27.8	1.32	395.16			
14.13		1.18	473.24			
15.13		0.95	542.20			
16.13	28.9	0.66	596.88			
17.13		0.36	634.08			
18.13		0.11	653.68			
19.13	23.9	0.00	659.40			
20.13		0.00	659.40			
21.13		0.00	659.40			
22.13	18.9	0.00	659.40			
23.13		0.00	659.40			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 8- 5-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.768	0.000	0.097	0.097								
1.13	0.749	0.000	0.094	0.094								
2.13	0.729	0.000	0.093	0.093								
3.13	0.707	0.000	0.089	0.089								
4.13	0.692	0.000	0.088	0.088								
5.13	0.675	0.000	0.084	0.084								
6.13	0.648	0.000	0.084	0.084								
7.13	0.636	0.000	0.086	0.086								
8.13	0.613	0.003	0.089	0.092								
9.13	0.598	0.007	0.090	0.097								
10.13	0.600	0.003	0.088	0.091								
11.13		0.003	0.084	0.088								
12.13	0.652	0.015	0.079	0.094								
13.13	0.680	0.012	0.073	0.084								
14.13	0.684	0.011	0.068	0.079								
15.13	0.674	0.009	0.063	0.072								
16.13	0.657	0.007	0.060	0.067								
17.13	0.630	0.009	0.057	0.065								
18.13	0.609	0.010	0.052	0.062								
19.13	0.586	0.010	0.047	0.057								
20.13	0.564	0.010	0.046	0.056								
21.13	0.542	0.009	0.044	0.052								
22.13	0.523	0.009	0.043	0.051								
23.13	0.506	0.009	0.041	0.049								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	17.2	0.00	0.00			
5.13		0.01	0.08			
6.13		0.12	1.56			
7.13	18.3	0.45	11.40			
8.13		0.73	40.64			
9.13		0.99	86.52			
10.13	26.1	1.18	147.44			
11.13		1.33	219.44			
12.13		1.39	299.72			
13.13	29.4	1.32	382.56			
14.13		0.93	458.64			
15.13		0.89	514.12			
16.13	31.1	0.46	564.08			
17.13		0.28	590.24			
18.13		0.13	605.84			
19.13	26.1	0.01	612.68			
20.13		0.00	613.20			
21.13		0.00	613.20			
22.13	21.7	0.00	613.20			
23.13		0.00	613.20			

% POSSIBLE MINUTES OF SUNSHINE 81

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* [NO] data from 1200 EST, 5 August 76 until 0600 EST, 6 August 76 are suspect, but have been retained. A range change was made without a zero check being taken.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 3 OF 3 8- 6-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.489	0.007	0.041	0.048								
1.13	0.473	0.007	0.039	0.046								
2.13	0.460	0.007	0.037	0.045								
3.13	0.444	0.006	0.035	0.042								
4.13	0.430	0.006	0.034	0.041								
5.13	0.418	0.005	0.033	0.039								
6.13	0.405	0.005	0.033	0.039								
7.13	0.384	0.000	0.041	0.041								
8.13	0.366	0.000	0.046	0.046								
9.13	0.358	0.002	0.048	0.050								
10.13	0.369	0.000	0.051	0.051								
11.13	0.393	0.001	0.048	0.049								
12.13	0.426	0.000	0.048	0.048								
13.13	0.444	0.002	0.046	0.048								
14.13	0.458	0.000	0.044	0.044								
15.13	0.460	0.000	0.044	0.044								
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.3	0.00	0.00			
5.13		0.02	0.16			
6.13		0.17	2.56			
7.13	20.0	0.42	14.76			
8.13		0.69	42.12			
9.13		0.93	85.44			
10.13	27.8	1.09	142.52			
11.13		1.27	209.36			
12.13		1.31	285.88			
13.13	32.2	1.26	364.08			
14.13		1.08	438.24			
15.13		0.92	501.76			
16.13	32.2	0.57	554.16			
17.13		0.31	586.28			
18.13		0.04	602.72			
19.13	27.8	0.01	604.88			
20.13		0.00	605.40			
21.13		0.00	605.40			
22.13	25.0	0.00	605.40			
23.13		0.00	605.40			

% POSSIBLE MINUTES OF SUNSHINE 80

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 8- 4-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.663	0.204	0.867								
1.30	0.000	0.659	0.213	0.872								
2.30	0.000	0.655	0.228	0.882								
3.30	0.000	0.637	0.222	0.860								
4.30	0.000	0.846	0.234	1.080								
5.30	0.000	0.834	0.245	1.079								
6.30	0.000	0.727	0.326	1.053								
7.30	0.000	0.337	0.662	0.999								
8.30	0.035	0.110	0.788	0.898					0.245	0.660	0.226	
9.30	0.092	0.058	0.751	0.809								
10.30	0.200	0.029	0.684	0.713								
11.30	0.366	0.019	0.578	0.597								
12.30	0.596	0.015	0.446	0.461								
13.30	0.837	0.012	0.311	0.323					*	*	0.245	
14.30	1.020	0.013	0.236	0.249								
15.30	1.073	0.011	0.205	0.216								
16.30	1.071	0.011	0.182	0.193								
17.30	1.042	0.013	0.166	0.179								
18.30	1.005	0.010	0.149	0.158								
19.30	0.954	0.003	0.138	0.141								
20.30	0.904	0.000	0.128	0.128								
21.30	0.870	0.000	0.123	0.123								
22.30	0.842	0.000	0.118	0.118								
23.30	0.818	0.000	0.116	0.116								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	15.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	15.0	0.00	0.00			
5.30		0.01	0.18			
6.30		0.20	4.20			
7.30	16.7	0.48	21.24			
8.30		0.76	55.08			
9.30		1.02	105.36			
10.30	24.4	1.22	170.16			
11.30		1.34	245.52			
12.30		1.38	326.64			
13.30	27.8	1.32	408.36			
14.30		1.18	485.04			
15.30		0.95	551.70			
16.30	28.9	0.66	603.48			
17.30		0.36	637.68			
18.30		0.11	654.78			
19.30	23.9	0.00	659.40			
20.30		0.00	659.40			
21.30		0.00	659.40			
22.30	18.9	0.00	659.40			
23.30		0.00	659.40			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 8- 5-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.799	0.000	0.110	0.110								
1.30	0.781	0.000	0.108	0.108								
2.30	0.759	0.000	0.106	0.106								
3.30	0.741	0.000	0.105	0.105								
4.30	0.726	0.000	0.102	0.102								
5.30	0.709	0.000	0.098	0.098								
6.30	0.689	0.000	0.097	0.097								
7.30	0.680	0.000	0.098	0.098								
8.30	0.662	0.004	0.098	0.103								
9.30	0.653	0.011	0.096	0.107								
10.30	0.661	0.011	0.095	0.106								
11.30		0.010	0.094	0.104								
12.30	0.729	0.021	0.090	0.111								
13.30	0.774	0.019	0.086	0.105								
14.30	0.791	0.016	0.079	0.095								
15.30	0.791	0.016	0.076	0.092								
16.30	0.783	0.015	0.073	0.088								
17.30	0.765	0.016	0.067	0.083								
18.30	0.741	0.018	0.064	0.082								
19.30	0.715	0.014	0.056	0.070								
20.30	0.677	0.010	0.053	0.063								
21.30	0.656	0.009	0.051	0.060								
22.30	0.637	0.007	0.049	0.057								
23.30	0.621	0.009	0.047	0.056								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	17.2	0.00	0.00			
5.30		0.01	0.18			
6.30		0.12	2.76			
7.30	18.3	0.45	15.90			
8.30		0.73	47.94			
9.30		0.99	96.42			
10.30	26.1	1.18	159.24			
11.30		1.33	232.74			
12.30		1.39	313.62			
13.30	29.4	1.32	395.76			
14.30		0.93	467.94			
15.30		0.89	523.02			
16.30	31.1	0.46	568.68			
17.30		0.28	593.04			
18.30		0.13	607.14			
19.30	26.1	0.01	612.78			
20.30		0.00	613.20			
21.30		0.00	613.20			
22.30	21.7	0.00	613.20			
23.30		0.00	613.20			

% POSSIBLE MINUTES OF SUNSHINE 81

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* [NO] data from 1200 EST, 5 August 76 until 0600 EST, 6 August 76 are suspect, but have been retained. A range change was made without a zero check being taken.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 8- 6-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.607	0.007	0.045	0.052								
1.30	0.591	0.006	0.044	0.050								
2.30	0.580	0.006	0.042	0.048								
3.30	0.567	0.006	0.041	0.047								
4.30	0.555	0.006	0.040	0.046								
5.30	0.544	0.004	0.037	0.042								
6.30	0.535	0.005	0.037	0.043								
7.30	0.520	0.000	0.042	0.042								
8.30	0.502	0.000	0.048	0.048								
9.30	0.487	0.011	0.050	0.061								
10.30	0.481	0.010	0.052	0.062								
11.30	0.501	0.010	0.053	0.063								
12.30	0.526	0.011	0.055	0.065								
13.30	0.551	0.012	0.053	0.065								
14.30	0.568	0.011	0.053	0.064								
15.30	0.578	0.011	0.053	0.064								
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	18.3	0.00	0.00			
5.30		0.02	0.36			
6.30		0.17	4.26			
7.30	20.0	0.42	18.96			
8.30		0.69	49.02			
9.30		0.93	94.74			
10.30	27.8	1.09	153.42			
11.30		1.27	222.06			
12.30		1.31	298.98			
13.30	32.2	1.26	376.68			
14.30		1.08	449.04			
15.30		0.92	510.96			
16.30	32.2	0.57	559.86			
17.30		0.31	589.38			
18.30		0.04	605.12			
19.30	27.8	0.01	604.98			
20.30		0.00	605.40			
21.30		0.00	605.40			
22.30	25.0	0.00	605.40			
23.30		0.00	605.40			

% POSSIBLE MINUTES OF SUNSHINE 80

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 8- 4-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.507	0.186	0.693								
1.47	0.000	0.496	0.185	0.681								
2.47	0.000	0.494	0.195	0.689								
3.47	0.000	0.478	0.191	0.670								
4.47	0.000	0.855	0.219	1.074								
5.47	0.000	0.834	0.233	1.067								
6.47	0.000	0.706	0.330	1.036								
7.47	0.000	0.283	0.681	0.965								
8.47	0.045	0.075	0.813	0.888								
9.47	0.129	0.025	0.772	0.797					0.264	0.550	0.223	
10.47	0.271	0.011	0.672	0.682								
11.47	0.450	0.007	0.534	0.541								
12.47	0.655	0.006	0.412	0.418								
13.47	0.861	0.007	0.303	0.310								
14.47	0.995	0.009	0.231	0.240					*	*	0.192	
15.47	1.037	0.004	0.193	0.197								
16.47	1.019	0.003	0.180	0.183								
17.47	0.975	0.004	0.148	0.152								
18.47	0.932	0.002	0.132	0.134								
19.47	0.890	0.002	0.121	0.123								
20.47	0.849	0.000	0.112	0.112								
21.47	0.820	0.000	0.106	0.106								
22.47	0.792	0.000	0.101	0.101								
23.47	0.770	0.000	0.097	0.097								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	15.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	15.0	0.00	0.00			
5.47		0.01	0.28			
6.47		0.20	6.20			
7.47	16.7	0.48	26.04			
8.47		0.76	62.68			
9.47		1.02	115.56			
10.47	24.4	1.22	182.36			
11.47		1.34	258.92			
12.47		1.38	340.44			
13.47	27.8	1.32	421.56			
14.47		1.18	496.84			
15.47		0.95	561.20			
16.47	28.9	0.66	610.08			
17.47		0.36	641.28			
18.47		0.11	655.88			
19.47	23.9	0.00	659.40			
20.47		0.00	659.40			
21.47		0.00	659.40			
22.47	18.9	0.00	659.40			
23.47		0.00	659.40			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 8- 5-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.750	0.000	0.095	0.095								
1.47	0.733	0.000	0.093	0.093								
2.47	0.711	0.000	0.090	0.090								
3.47	0.695	0.000	0.087	0.087								
4.47	0.679	0.000	0.087	0.087								
5.47	0.662	0.000	0.083	0.083								
6.47	0.642	0.000	0.083	0.083								
7.47	0.636	0.000	0.084	0.084								
8.47	0.612	0.003	0.086	0.089								
9.47	0.597	0.005	0.080	0.086								
10.47	0.610	0.005	0.077	0.082								
11.47		0.002	0.074	0.076								
12.47	0.642	0.012	0.066	0.078								
13.47	0.663	0.012	0.060	0.072								
14.47	0.653	0.009	0.058	0.066								
15.47	0.640	0.009	0.052	0.061								
16.47	0.615	0.009	0.049	0.058								
17.47	0.588	0.009	0.046	0.055								
18.47	0.567	0.010	0.042	0.051								
19.47	0.545	0.009	0.037	0.046								
20.47	0.528	0.009	0.036	0.045								
21.47	0.513	0.009	0.036	0.045								
22.47	0.497	0.007	0.034	0.042								
23.47	0.484	0.007	0.033	0.041								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	17.2	0.00	0.00			
5.47		0.01	0.28			
6.47		0.12	5.96			
7.47	18.3	0.45	20.40			
8.47		0.73	55.24			
9.47		0.99	106.52			
10.47	26.1	1.18	171.04			
11.47		1.33	246.04			
12.47		1.39	327.52			
13.47	29.4	1.32	408.96			
14.47		0.93	477.24			
15.47		0.89	551.92			
16.47	31.1	0.46	573.28			
17.47		0.28	595.84			
18.47		0.13	608.44			
19.47	26.1	0.01	612.88			
20.47		0.00	613.20			
21.47		0.00	613.20			
22.47	21.7	0.00	613.20			
23.47		0.00	613.20			

% POSSIBLE MINUTES OF SUNSHINE 81

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* [NO] data from 1200 EST, 5 August 76 until 0600 EST, 6 August 76 are suspect, but have been retained. A range change was made without a zero check being taken.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 8- 6-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.472	0.007	0.032	0.040								
1.47	0.459	0.006	0.032	0.039								
2.47	0.447	0.006	0.030	0.036								
3.47	0.436	0.006	0.029	0.035								
4.47	0.426	0.005	0.028	0.033								
5.47	0.415	0.004	0.027	0.031								
6.47	0.406	0.000	0.029	0.029								
7.47	0.393	0.000	0.032	0.032								
8.47	0.374	0.000	0.034	0.034								
9.47	0.364	0.006	0.035	0.042								
10.47	0.364	0.001	0.034	0.035								
11.47	0.375	0.002	0.034	0.036								
12.47	0.390	0.001	0.034	0.035								
13.47	0.395	0.003	0.034	0.037								
14.47	0.397	0.003	0.032	0.035								
15.47	0.394	0.003	0.032	0.035								
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.3	0.00	0.00			
5.47		0.02	0.56			
6.47		0.17	5.96			
7.47	20.0	0.42	23.16			
8.47		0.69	55.92			
9.47		0.93	104.04			
10.47	27.8	1.09	164.32			
11.47		1.27	234.76			
12.47		1.31	312.08			
13.47	32.2	1.26	389.28			
14.47		1.08	459.84			
15.47		0.92	520.16			
16.47	32.2	0.57	565.56			
17.47		0.31	592.48			
18.47		0.04	603.52			
19.47	27.8	0.01	605.08			
20.47		0.00	605.40			
21.47		0.00	605.40			
22.47	25.0	0.00	605.40			
23.47		0.00	605.40			

% POSSIBLE MINUTES OF SUNSHINE 80

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 8- 4-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.620	0.243	0.863								
1.63	0.000	0.601	0.245	0.846								
2.63	0.000	0.600	0.256	0.856								
3.63	0.000	0.580	0.251	0.831								
4.63	0.000	0.851	0.260	1.111								
5.63	0.000	0.843	0.276	1.119								
6.63	0.000	0.671	0.406	1.077								
7.63	0.000	0.228	0.780	1.007								
8.63	0.053	0.055	0.864	0.919								
9.63	0.149	0.018	0.813	0.831					0.205	0.696	0.304	
10.63	0.305	0.009	0.701	0.709								
11.63	0.492	0.004	0.556	0.560								
12.63	0.707	0.003	0.433	0.436								
13.63	0.909	0.004	0.328	0.333					*	*		
14.63	1.037	0.005	0.256	0.261							0.290	
15.63	1.064	0.003	0.216	0.219								
16.63	1.036	0.003	0.194	0.197								
17.63	0.985	0.003	0.172	0.175								
18.63	0.938	0.002	0.153	0.155								
19.63	0.898	0.002	0.143	0.145								
20.63	0.861	0.000	0.134	0.134								
21.63	0.832	0.000	0.127	0.127								
22.63	0.809	0.000	0.123	0.123								
23.63	0.790	0.000	0.118	0.118								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	15.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	15.0	0.00	0.00			
5.63		0.01	0.38			
6.63		0.20	8.20			
7.63	16.7	0.48	30.84			
8.63		0.76	70.28			
9.63		1.02	125.76			
10.63	24.4	1.22	194.56			
11.63		1.34	272.32			
12.63		1.38	354.24			
13.63	27.8	1.32	434.76			
14.63		1.18	508.64			
15.63		0.95	570.70			
16.63	28.9	0.66	616.68			
17.63		0.36	644.88			
18.63		0.11	656.98			
19.63	23.9	0.00	659.40			
20.63		0.00	659.40			
21.63		0.00	659.40			
22.63	18.9	0.00	659.40			
23.63		0.00	659.40			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 28.9 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8- 5-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.770	0.000	0.116	0.116								
1.63	0.755	0.000	0.112	0.112								
2.63	0.737	0.000	0.109	0.109								
3.63	0.720	0.000	0.107	0.107								
4.63	0.706	0.000	0.105	0.105								
5.63	0.688	0.000	0.104	0.104								
6.63	0.673	0.000	0.102	0.102								
7.63	0.661	0.000	0.105	0.105								
8.63	0.638	0.000	0.105	0.105								
9.63	0.630	0.003	0.102	0.105								
10.63	0.646	0.003	0.097	0.101								
11.63	0.650	0.002	0.092	0.094								
12.63	0.683	0.012	0.084	0.096								
13.63	0.704	0.010	0.077	0.087								
14.63	0.694	0.009	0.073	0.081								
15.63	0.676	0.007	0.067	0.075								
16.63	0.653	0.009	0.065	0.074								
17.63	0.629	0.009	0.060	0.068								
18.63	0.607	0.009	0.056	0.064								
19.63	0.586	0.010	0.050	0.060								
20.63	0.570	0.009	0.050	0.059								
21.63	0.556	0.009	0.048	0.057								
22.63	0.541	0.007	0.047	0.055								
23.63	0.528	0.007	0.045	0.052								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	17.2	0.00	0.00			
5.63		0.01	0.38			
6.63		0.12	5.16			
7.63	18.3	0.45	24.90			
8.63		0.73	62.54			
9.63		0.99	116.22			
10.63	26.1	1.18	182.84			
11.63		1.33	259.34			
12.63		1.39	341.42			
13.63	29.4	1.32	422.16			
14.63		0.93	486.54			
15.63		0.89	540.82			
16.63	31.1	0.46	577.88			
17.63		0.28	598.64			
18.63		0.13	609.74			
19.63	26.1	0.01	612.98			
20.63		0.00	613.20			
21.63		0.00	613.20			
22.63	21.7	0.00	613.20			
23.63		0.00	613.20			

% POSSIBLE MINUTES OF SUNSHINE 81

RDU AIRPORT MAXIMUM TEMPERATURE 31.1 CENT

* [NO] data from 1200 EST, 5 August 76 until 0600 EST, 6 August 76 are suspect, but have been retained. A range change was made without a zero check being taken.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8- 6-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.513	0.007	0.043	0.050								
1.63	0.502	0.006	0.042	0.048								
2.63	0.491	0.006	0.040	0.046								
3.63	0.480	0.006	0.039	0.045								
4.63	0.468	0.005	0.035	0.041								
5.63	0.460	0.004	0.034	0.039								
6.63	0.451	0.000	0.034	0.034								
7.63	0.437	0.000	0.041	0.041								
8.63	0.417	0.000	0.044	0.044								
9.63	0.403	0.000	0.046	0.046								
10.63	0.400	0.000	0.045	0.045								
11.63	0.406	0.002	0.045	0.047								
12.63	0.416	0.001	0.045	0.046								
13.63	0.427	0.000	0.045	0.045								
14.63	0.427	0.002	0.045	0.047								
15.63	0.422	0.003	0.043	0.046								
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.3	0.00	0.00			
5.63		0.02	0.76			
6.63		0.17	7.66			
7.63	20.0	0.42	27.36			
8.63		0.69	62.82			
9.63		0.93	113.34			
10.63	27.8	1.09	175.22			
11.63		1.27	247.46			
12.63		1.31	325.18			
13.63	32.2	1.26	401.88			
14.63		1.08	470.64			
15.63		0.92	529.56			
16.63	32.2	0.57	571.26			
17.63		0.31	595.58			
18.63		0.04	603.92			
19.63	27.8	0.01	605.18			
20.63		0.00	605.40			
21.63		0.00	605.40			
22.63	25.0	0.00	605.40			
23.63		0.00	605.40			

% POSSIBLE MINUTES OF SUNSHINE 80

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 3 8-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.018	0.003	0.021								
1.13	0.000	0.018	0.003	0.021								
2.13	0.000	0.020	0.002	0.022								
3.13	0.000	0.024	0.002	0.026								
4.13	0.000	0.022	0.228	0.250								
5.13	0.000	0.647	0.253	0.901								
6.13	0.000	0.724	0.283	1.007								
7.13	0.000	0.365	0.646	1.011								
8.13	0.327	0.019	0.763	0.782								
9.13	0.599	0.019	0.597	0.616								
10.13	0.945	0.015	0.452	0.467					1.003	0.055	0.493	
11.13	1.166	0.014	0.357	0.371								
12.13	1.224	0.013	0.316	0.328								
13.13	1.275	0.010	0.258	0.267								
14.13	1.225	0.006	0.194	0.200								
15.13	1.180	0.006	0.170	0.176								
16.13	1.110	0.006	0.147	0.153					1.177	0.018	0.399	
17.13	1.036	0.009	0.128	0.137								
18.13	0.982	0.010	0.112	0.122								
19.13	0.939	0.010	0.101	0.110								
20.13	0.905	0.011	0.091	0.102								
21.13	0.876	0.010	0.086	0.095								
22.13	0.850	0.011	0.082	0.093								
23.13	0.828	0.010	0.074	0.083								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	22.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	21.1	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	22.8	0.31	9.68			
8.13		0.59	30.52			
9.13		0.83	67.84			
10.13	28.9	1.01	119.08			
11.13		1.16	180.88			
12.13		1.20	250.80			
13.13	31.7	1.09	321.92			
14.13		0.84	385.32			
15.13		0.55	433.40			
16.13	31.7	0.46	465.68			
17.13		0.20	491.20			
18.13		0.03	501.84			
19.13	27.8	0.00	503.40			
20.13		0.00	503.40			
21.13		0.00	503.40			
22.13	25.6	0.00	503.40			
23.13		0.00	503.40			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

CHAMBER NUMBER 1
DAY 2 OF 3 8-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.805	0.012	0.071	0.082								
1.13	0.781	0.012	0.067	0.079								
2.13	0.760	0.012	0.063	0.075								
3.13	0.740	0.013	0.061	0.074								
4.13	0.726	0.013	0.060	0.073								
5.13	0.706	0.014	0.058	0.072								
6.13	0.686	0.013	0.056	0.068								
7.13	0.663	0.014	0.056	0.070								
8.13	0.632	0.014	0.056	0.070								
9.13	0.600	0.015	0.056	0.071								
10.13	0.567	0.016	0.058	0.074					0.562	0.010	0.283	
11.13	0.537	0.016	0.058	0.074								
12.13	0.528	0.015	0.059	0.074								
13.13	0.522	0.014	0.060	0.074								
14.13	0.514	0.013	0.058	0.071								
15.13	0.505	0.012	0.056	0.067								
16.13	0.484	0.012	0.056	0.067					0.529	0.009	0.118	
17.13	0.461	0.012	0.053	0.065								
18.13	0.442	0.012	0.049	0.061								
19.13	0.426	0.014	0.045	0.059								
20.13	0.410	0.014	0.045	0.059								
21.13	0.396	0.016	0.044	0.060								
22.13	0.385	0.016	0.043	0.059								
23.13	0.373	0.017	0.042	0.059								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	23.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	25.3	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	23.9	0.27	9.36			
8.13		0.30	25.80			
9.13		0.47	45.16			
10.13	26.1	0.70	75.20			
11.13		0.83	118.24			
12.13		1.12	170.36			
13.13	31.7	1.08	237.24			
14.13		0.93	300.84			
15.13		0.58	353.84			
16.13	31.1	0.42	387.56			
17.13		0.22	410.96			
18.13		0.04	422.72			
19.13	26.1	0.00	424.80			
20.13		0.00	424.80			
21.13		0.00	424.80			
22.13	25.3	0.00	424.80			
23.13		0.00	424.80			

% POSSIBLE MINUTES OF SUNSHINE 33

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* [NO] Readings suspect but retained. Thermal zero drift in the instrument probably is the cause of the apparent elevated [NO].

CHAMBER NUMBER 1
DAY 3 OF 5 8-26-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.363	0.016	0.041	0.057								
1.13	0.351	0.017	0.039	0.056								
2.13	0.338	0.018	0.040	0.058								
3.13	0.320	0.018	0.039	0.057								
4.13	0.304	0.020	0.039	0.059								
5.13	0.289	0.020	0.037	0.058								
6.13	0.272	0.018	0.037	0.056								
7.13	0.256	0.018	0.044	0.062								
8.13	0.240	0.018	0.052	0.071								
9.13	0.255	0.020	0.053	0.074								
10.13	0.290	0.021	0.056	0.077					0.528	0.011	0.196	
11.13	0.349	0.018	0.056	0.074								
12.13	0.394	0.018	0.055	0.073								
13.13	0.436	0.014	0.053	0.067								
14.13	0.448	0.014	0.051	0.065								
15.13	0.448	0.013	0.050	0.063								
16.13	0.442	0.012	0.048	0.060					0.462	0.009	0.037	
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	22.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.6	0.00	0.00			
5.13		0.01	0.08			
6.13		0.11	1.48			
7.13	21.1	0.29	9.52			
8.13		0.58	29.24			
9.13		0.76	65.48			
10.13	27.8	1.08	113.64			
11.13		1.19	179.32			
12.13		1.22	250.96			
13.13	31.1	1.07	322.96			
14.13		0.86	385.48			
15.13		0.81	436.68			
16.13	30.6	0.49	482.72			
17.13		0.22	509.96			
18.13		0.05	521.64			
19.13	26.7	0.00	523.20			
20.13		0.00	523.20			
21.13		0.00	523.20			
22.13	23.9	0.00	523.20			
23.13		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument probably is the cause of the leevated [NO].

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 8-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.019	0.007	0.027								
1.30	0.000	0.019	0.009	0.028								
2.30	0.000	0.024	0.012	0.035								
3.30	0.000	0.025	0.014	0.039								
4.30	0.000	0.024	0.185	0.209								
5.30	0.000	0.537	0.200	0.737								
6.30	0.000	0.498	0.242	0.740								
7.30	0.000	0.233	0.499	0.733								
8.30	0.138	0.031	0.615	0.646								
9.30	0.310	0.022	0.541	0.564								
10.30	0.558	0.018	0.438	0.457					0.577	0.236	0.275	
11.30	0.908	0.016	0.287	0.303								
12.30	1.067	0.015	0.232	0.247								
13.30	1.144	0.013	0.189	0.202								
14.30	1.148	0.010	0.151	0.160								
15.30	1.111	0.010	0.133	0.142								
16.30	1.065	0.010	0.116	0.125					1.122	0.018	0.234	
17.30	1.016	0.013	0.102	0.114								
18.30	0.974	0.013	0.089	0.102								
19.30	0.943	0.012	0.077	0.089								
20.30	0.912	0.014	0.072	0.086								
21.30	0.888	0.013	0.068	0.081								
22.30	0.864	0.013	0.064	0.077								
23.30	0.837	0.013	0.060	0.073								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	22.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	21.1	0.00	0.00			
5.30		0.01	0.18			
6.30		0.11	2.58			
7.30	22.8	0.31	12.78			
8.30		0.59	36.42			
9.30		0.83	76.14			
10.30	28.9	1.01	129.18			
11.30		1.16	192.48			
12.30		1.20	262.80			
13.30	31.7	1.09	332.82			
14.30		0.84	393.72			
15.30		0.55	438.90			
16.30	31.7	0.46	470.28			
17.30		0.20	493.20			
18.30		0.03	502.14			
19.30	27.8	0.00	503.40			
20.30		0.00	503.40			
21.30		0.00	503.40			
22.30	25.6	0.00	503.40			
23.30		0.00	503.40			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

CHAMBER NUMBER 2
DAY 2 OF 3 8-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.812	0.014	0.058	0.072								
1.30	0.789	0.014	0.056	0.070								
2.30	0.764	0.014	0.053	0.067								
3.30	0.741	0.015	0.052	0.067								
4.30	0.725	0.014	0.052	0.066								
5.30	0.702	0.016	0.052	0.068								
6.30	0.676	0.014	0.056	0.070								
7.30	0.643	0.014	0.056	0.070								
8.30	0.609	0.016	0.058	0.074								
9.30	0.583	0.017	0.057	0.074								
10.30	0.567	0.018	0.058	0.076					0.564	0.009	0.150	
11.30	0.559	0.018	0.058	0.076								
12.30	0.574	0.017	0.057	0.074								
13.30	0.579	0.016	0.056	0.072								
14.30	0.584	0.014	0.053	0.067								
15.30	0.582	0.014	0.053	0.067								
16.30	0.566	0.014	0.050	0.064					0.591	0.009	0.061	
17.30	0.545	0.014	0.047	0.061								
18.30	0.529	0.014	0.043	0.057								
19.30	0.513	0.016	0.040	0.056								
20.30	0.498	0.015	0.039	0.053								
21.30	0.480	0.016	0.036	0.052								
22.30	0.464	0.018	0.036	0.055								
23.30	0.449	0.018	0.036	0.055								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	23.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	25.5	0.00	0.00			
5.30		0.01	0.18			
6.30		0.11	2.58			
7.30	25.9	0.27	12.06			
8.30		0.30	28.80			
9.30		0.47	49.86			
10.30	26.1	0.70	82.20			
11.30		0.83	126.54			
12.30		1.12	181.56			
13.30	31.7	1.08	248.04			
14.30		0.93	310.14			
15.30		0.58	359.64			
16.30	31.1	0.42	391.56			
17.30		0.22	413.16			
18.30		0.04	423.12			
19.30	26.1	0.00	424.80			
20.30		0.00	424.80			
21.30		0.00	424.80			
22.30	23.3	0.00	424.80			
23.30		0.00	424.80			

% POSSIBLE MINUTES OF SUNSHINE 33

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument probably is the cause of the elevated [NO].

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 5 OF 5 8-26-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50	0.433	0.017	0.037	0.055								
1.50	0.418	0.017	0.036	0.053								
2.50	0.401	0.018	0.036	0.055								
3.50	0.385	0.016	0.036	0.052								
4.50	0.372	0.020	0.037	0.058								
5.30	0.355	0.018	0.039	0.057								
6.30	0.341	0.017	0.043	0.060								
7.30	0.321	0.017	0.051	0.068								
8.30	0.312	0.019	0.058	0.077								
9.30	0.338	0.019	0.059	0.078					0.391	0.011	0.102	
10.30	0.384	0.022	0.060	0.082								
11.30	0.441	0.020	0.057	0.077								
12.30	0.495	0.018	0.056	0.074								
13.30	0.536	0.016	0.052	0.068								
14.30	0.548	0.015	0.050	0.065								
15.30	0.553	0.014	0.049	0.063								
16.30	0.547	0.012	0.048	0.060					0.545	0.009	0.010	
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.50	22.2	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	20.6	0.00	0.00			
5.50		0.01	0.18			
6.30		0.11	2.58			
7.50	21.1	0.29	12.42			
8.50		0.58	35.04			
9.50		0.76	75.08			
10.50	27.8	1.08	124.44			
11.50		1.19	191.22			
12.50		1.22	265.16			
13.30	31.1	1.07	335.66			
14.30		0.86	394.08			
15.50		0.81	444.78			
16.50	30.6	0.49	487.62			
17.50		0.22	512.16			
18.30		0.03	521.94			
19.50	26.7	0.00	523.20			
20.50		0.00	523.20			
21.50		0.00	523.20			
22.50	23.9	0.00	523.20			
23.30		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument probably is the cause of the apparently elevated [NO].

CHAMBER NUMBER 5
DAY 1 OF 3 8-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.018	0.003	0.021								
1.47	0.000	0.021	0.004	0.026								
2.47	0.000	0.024	0.004	0.028								
3.47	0.000	0.025	0.004	0.029								
4.47	0.000	0.024	0.066	0.090								
5.47	0.000	0.187	0.070	0.257								
6.47	0.000	0.138	0.122	0.260								
7.47	0.172	0.015	0.211	0.226								
8.47	0.518	0.016	0.190	0.206								
9.47	0.481	0.015	0.178	0.193					0.575	0.025	0.239	
10.47	0.634	0.013	0.159	0.172								
11.47	0.780	0.012	0.138	0.150								
12.47	0.847	0.011	0.123	0.134								
13.47	0.881	0.009	0.104	0.112								
14.47	0.865	0.007	0.084	0.092								
15.47	0.831	0.009	0.076	0.084					0.770	0.015	0.177	
16.47	0.787	0.007	0.068	0.076								
17.47	0.740	0.011	0.059	0.070								
18.47	0.705	0.011	0.051	0.062								
19.47	0.677	0.011	0.045	0.056								
20.47	0.656	0.012	0.041	0.052								
21.47	0.641	0.012	0.040	0.051								
22.47	0.622	0.012	0.036	0.048								
23.47	0.605	0.012	0.034	0.046								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	21.1	0.00	0.00			
5.47		0.01	0.28			
6.47		0.11	5.68			
7.47	22.8	0.31	15.88			
8.47		0.59	42.52			
9.47		0.83	84.44			
10.47	28.9	1.01	139.28			
11.47		1.16	204.08			
12.47		1.20	274.80			
13.47	31.7	1.09	343.72			
14.47		0.84	402.12			
15.47		0.55	444.40			
16.47	31.7	0.46	474.88			
17.47		0.20	495.20			
18.47		0.03	502.44			
19.47	27.8	0.00	503.40			
20.47		0.00	503.40			
21.47		0.00	503.40			
22.47	25.6	0.00	503.40			
23.47		0.00	503.40			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 2 OF 5 8-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.587	0.013	0.032	0.045								
1.47	0.567	0.015	0.031	0.044								
2.47	0.553	0.013	0.029	0.042								
3.47	0.536	0.014	0.028	0.042								
4.47	0.524	0.014	0.028	0.042								
5.47	0.511	0.015	0.027	0.042								
6.47	0.496	0.013	0.026	0.039								
7.47	0.478	0.015	0.027	0.042								
8.47	0.458	0.015	0.028	0.043								
9.47	0.434	0.016	0.028	0.044								
10.47	0.414	0.018	0.030	0.048								
11.47	0.400	0.017	0.030	0.047					0.376	0.006	0.136	
12.47	0.407	0.017	0.031	0.048								
13.47	0.411	0.016	0.032	0.048								
14.47	0.415	0.014	0.032	0.046								
15.47	0.411	0.013	0.031	0.044								
16.47	0.397	0.014	0.030	0.044								
17.47	0.381	0.013	0.029	0.042					0.390	0.009	0.038	
18.47	0.363	0.014	0.026	0.040								
19.47	0.345	0.016	0.024	0.040								
20.47	0.334	0.016	0.022	0.039								
21.47	0.321	0.017	0.021	0.039								
22.47	0.311	0.017	0.021	0.039								
23.47	0.299	0.018	0.020	0.039								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	23.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	23.3	0.00	0.00			
5.47		0.01	0.28			
6.47		0.11	5.68			
7.47	25.9	0.27	14.76			
8.47		0.50	31.80			
9.47		0.47	54.56			
10.47	26.1	0.70	89.20			
11.47		0.83	134.84			
12.47		1.12	192.76			
13.47	31.7	1.08	258.84			
14.47		0.93	319.44			
15.47		0.58	365.44			
16.47	31.1	0.42	395.76			
17.47		0.22	415.36			
18.47		0.04	423.52			
19.47	26.1	0.00	424.80			
20.47		0.00	424.80			
21.47		0.00	424.80			
22.47	23.3	0.00	424.80			
23.47		0.00	424.80			

% POSSIBLE MINUTES OF SUNSHINE 33

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument is probably the cause of the apparently elevated [NO].

CHAMBER NUMBER 3 URBAN MIX 0% DILUTION
DAY 3 OF 5 8-26-76 TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.290	0.017	0.020	0.037								
1.47	0.278	0.018	0.020	0.039								
2.47	0.266	0.017	0.019	0.036								
3.47	0.255	0.017	0.019	0.036								
4.47	0.243	0.020	0.019	0.040								
5.47	0.232	0.018	0.019	0.037								
6.47	0.220	0.017	0.020	0.037								
7.47	0.209	0.018	0.028	0.046								
8.47	0.205	0.019	0.031	0.050								
9.47	0.226	0.019	0.032	0.051								
10.47	0.264	0.020	0.032	0.052					0.263	0.012	0.088	
11.47	0.308	0.019	0.031	0.050								
12.47	0.345	0.017	0.030	0.047								
13.47	0.366	0.015	0.029	0.044								
14.47	0.374	0.014	0.028	0.042								
15.47	0.374	0.013	0.028	0.041								
16.47	0.365	0.013	0.026	0.039					0.367	0.008	0.029	
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	22.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.6	0.00	0.00			
5.47		0.01	0.28			
6.47		0.11	3.68			
7.47	21.1	0.29	15.32			
8.47		0.58	40.84			
9.47		0.76	80.68			
10.47	27.8	1.08	135.24			
11.47		1.19	203.12			
12.47		1.22	275.36			
13.47	31.1	1.07	344.36			
14.47		0.86	402.68			
15.47		0.81	452.88			
16.47	30.6	0.49	492.52			
17.47		0.22	514.36			
18.47		0.03	522.24			
19.47	26.7	0.00	523.20			
20.47		0.00	523.20			
21.47		0.00	523.20			
22.47	25.9	0.00	523.20			
23.47		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument is probably the cause of the apparently elevated [NO].

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 5 8-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.018	0.003	0.021								
1.63	0.000	0.021	0.003	0.025								
2.63	0.000	0.022	0.003	0.026								
3.63	0.000	0.022	0.004	0.027								
4.63	0.000	0.022	0.028	0.050								
5.63	0.000	0.079	0.031	0.110								
6.63	0.000	0.059	0.053	0.112								
7.63	0.055	0.017	0.090	0.107								
8.63	0.129	0.015	0.084	0.099								
9.63	0.225	0.014	0.076	0.090								
10.63	0.354	0.012	0.064	0.076					0.255	0.027	0.053	
11.63	0.429	0.012	0.052	0.064								
12.63	0.468	0.011	0.048	0.059								
13.63	0.491	0.010	0.043	0.052								
14.63	0.484	0.009	0.037	0.046								
15.63	0.472	0.009	0.035	0.044								
16.63	0.451	0.009	0.033	0.042					0.424	0.011	0.056	
17.63	0.455	0.013	0.029	0.042								
18.63	0.416	0.012	0.025	0.036								
19.63	0.402	0.013	0.020	0.033								
20.63	0.390	0.013	0.019	0.032								
21.63	0.383	0.013	0.018	0.031								
22.63	0.374	0.013	0.017	0.030								
23.63	0.366	0.014	0.016	0.030								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	22.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	21.1	0.00	0.00			
5.63		0.01	0.38			
6.63		0.11	4.78			
7.63	22.8	0.31	18.98			
8.63		0.59	48.22			
9.63		0.83	92.74			
10.63	28.9	1.01	149.56			
11.63		1.16	215.68			
12.63		1.20	286.80			
13.63	31.7	1.09	354.62			
14.63		0.84	410.52			
15.63		0.55	449.90			
16.63	31.7	0.46	479.48			
17.63		0.20	497.20			
18.63		0.03	502.74			
19.63	27.8	0.00	503.40			
20.63		0.00	503.40			
21.63		0.00	503.40			
22.63	25.6	0.00	503.40			
23.63		0.00	503.40			

% POSSIBLE MINUTES OF SUNSHINE 63

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 8-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.358	0.014	0.015	0.029								
1.63	0.350	0.015	0.015	0.030								
2.63	0.343	0.015	0.014	0.029								
3.63	0.334	0.017	0.013	0.030								
4.63	0.329	0.017	0.013	0.030								
5.63	0.321	0.016	0.013	0.029								
6.63	0.312	0.015	0.013	0.028								
7.63	0.301	0.017	0.014	0.031								
8.63	0.290	0.017	0.015	0.032								
9.63	0.277	0.019	0.015	0.034								
10.63	0.267	0.019	0.017	0.036					0.242	0.006	0.066	
11.63	0.264	0.019	0.019	0.039								
12.63	0.270	0.018	0.020	0.039								
13.63	0.274	0.017	0.020	0.037								
14.63	0.278	0.015	0.021	0.036								
15.63	0.274	0.015	0.021	0.036					0.265	0.007	0.017	
16.63	0.266	0.015	0.019	0.034								
17.63	0.256	0.015	0.019	0.034								
18.63	0.246	0.016	0.017	0.033								
19.63	0.237	0.018	0.015	0.033								
20.63	0.231	0.018	0.014	0.032								
21.63	0.225	0.019	0.013	0.032								
22.63	0.218	0.019	0.013	0.032								
23.63	0.213	0.019	0.013	0.032								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	23.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	23.3	0.00	0.00			
5.63		0.01	0.38			
6.63		0.11	4.78			
7.63	23.9	0.27	17.46			
8.63		0.30	34.80			
9.63		0.47	59.26			
10.63	26.1	0.70	96.20			
11.63		0.83	145.14			
12.63		1.12	203.96			
13.63	31.7	1.08	269.64			
14.63		0.93	328.74			
15.63		0.58	371.24			
16.63	31.1	0.42	399.96			
17.63		0.22	417.56			
18.63		0.04	423.92			
19.63	26.1	0.00	424.80			
20.63		0.00	424.80			
21.63		0.00	424.80			
22.63	25.5	0.00	424.80			
23.63		0.00	424.80			

% POSSIBLE MINUTES OF SUNSHINE 33

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument is probably the cause of the apparently elevated [NO].

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 8-26-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.209	0.013	0.013	0.026								
1.63	0.202	0.013	0.013	0.026								
2.63	0.195	0.012	0.012	0.024								
3.63	0.187	0.012	0.012	0.024								
4.63	0.180	0.012	0.012	0.024								
5.63	0.172	0.012	0.012	0.024								
6.63	0.164	0.013	0.013	0.026								
7.63	0.157	0.018	0.018	0.036								
8.63	0.159	0.020	0.020	0.041								
9.63	0.176	0.021	0.021	0.043								
10.63	0.207	0.021	0.021	0.043								
11.63	0.238	0.021	0.021	0.043					0.211	0.009	0.080	
12.63	0.266	0.021	0.021	0.043								
13.63	0.280	0.020	0.020	0.041								
14.63	0.289	0.020	0.020	0.041								
15.63	0.288	0.020	0.020	0.041								
16.63	0.280	0.019	0.019	0.039								
17.63									0.279	0.008	0.016	
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	22.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.6	0.00	0.00			
5.63		0.01	0.58			
6.63		0.11	4.78			
7.63	21.1	0.29	18.22			
8.63		0.58	46.64			
9.63		0.76	88.28			
10.63	27.8	1.08	146.04			
11.63		1.19	215.02			
12.63		1.22	287.56			
13.63	31.1	1.07	355.96			
14.63		0.86	411.28			
15.63		0.81	460.98			
16.63	30.6	0.49	497.42			
17.63		0.22	516.56			
18.63		0.03	522.54			
19.63	26.7	0.00	523.20			
20.63		0.00	523.20			
21.63		0.00	523.20			
22.63	23.9	0.00	523.20			
23.63		0.00	523.20			

% POSSIBLE MINUTES OF SUNSHINE 69

RDU AIRPORT MAXIMUM TEMPERATURE 32.8 CENT

* [NO] readings suspect but retained. Thermal zero drift in the instrument is probably the cuase of the apparently elevated [NO].

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 9- 8-76

ETHANE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.002	0.002	0.004								
1.13	0.000	0.002	0.002	0.004								
2.13	0.000	0.002	0.001	0.003								
3.13	0.000	0.001	0.001	0.002								
4.13	0.000	0.000	0.001	0.001								
5.13	0.000	0.155	0.014	0.169								
6.13	0.000	0.153	0.014	0.167								
7.13	0.000	0.151	0.016	0.167								
8.13	0.000	0.141	0.027	0.168								
9.13	0.000	0.121	0.045	0.166								
10.13	0.006	0.090	0.076	0.166					0.026	0.092	0.000	
11.13	0.022	0.056	0.104	0.159								
12.13	0.058	0.037	0.114	0.152								
13.13	0.120	0.015	0.101	0.116								
14.13	0.196	0.022	0.093	0.116								
15.13	0.267	0.017	0.081	0.098					*	0.095	0.000	
16.13	0.317	0.014	0.071	0.084								
17.13	0.322	0.014	0.061	0.075								
18.13	0.309	0.006	0.046	0.052								
19.13	0.282	0.004	0.028	0.032								
20.13	0.267	0.004	0.022	0.027								
21.13	0.257	0.003	0.020	0.024								
22.13	0.246	0.003	0.019	0.022								
23.13	0.236	0.003	0.018	0.021								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	13.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	12.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.09	0.72			
7.13	13.3	0.37	8.36			
8.13		0.66	32.88			
9.13		0.93	74.64			
10.13	25.0	1.12	131.96			
11.13		1.24	200.12			
12.13		1.27	274.76			
13.13	30.6	1.20	350.40			
14.13		1.03	421.04			
15.13		0.80	481.00			
16.13	31.7	0.51	526.68			
17.13		0.21	554.88			
18.13		0.02	565.96			
19.13	26.1	0.00	567.00			
20.13		0.00	567.00			
21.13		0.00	567.00			
22.13	18.9	0.00	567.00			
23.13		0.00	567.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 9- 9-76

ETHANE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.230	0.002	0.017	0.019								
1.13	0.224	0.002	0.017	0.019								
2.13	0.215	0.002	0.017	0.019								
3.13	0.210	0.002	0.016	0.018								
4.13	0.203	0.003	0.016	0.019								
5.13	0.196											
6.13	0.185											
7.13	0.172											
8.13	0.163	0.013	0.020	0.033					0.239 **	0.013	0.000	
9.13	0.168	0.021	0.025	0.046								
10.13	0.213	0.024	0.028	0.051								
11.13	0.271	0.028	0.029	0.057								
12.13	0.343	0.028	0.032	0.060								
13.13	0.424											
14.13	0.448	0.029	0.036	0.065					0.260 **	0.012	0.000	
15.13	0.445	0.028	0.039	0.066								
16.13	0.435	0.027	0.034	0.061								
17.13	0.416	0.026	0.030	0.056								
18.13	0.396	0.028	0.026	0.053								
19.13	0.375	0.024	0.022	0.046								
20.13	0.358	0.021	0.021	0.043								
21.13	0.343	0.018	0.020	0.039								
22.13	0.328	0.022	0.019	0.042								
23.13	0.311	0.025	0.018	0.043								

** Data suspect but retained.

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.04	0.32			
7.13	20.0	0.15	3.60			
8.13		0.49	15.52			
9.13		0.89	47.92			
10.13	26.7	1.09	102.92			
11.13		1.21	169.28			
12.13		1.25	242.20			
13.13	31.1	1.16	316.48			
14.13		0.93	384.24			
15.13		0.59	437.32			
16.13	31.7	0.32	470.56			
17.13		0.15	488.40			
18.13		0.04	496.32			
19.13	25.0	0.00	498.60			
20.13		0.00	498.60			
21.13		0.00	498.60			
22.13	23.9	0.00	498.60			
23.13		0.00	498.60			

% POSSIBLE MINUTES OF SUNSHINE 70

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* The NO, NO_2 and NO_x data from approximately 0000 EST, 9 Sept 76 until the end of the run are suspect but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. However, these effects are not seen for the simultaneous [NO_2] readings. Additionally, the [NO_2] level unexpectedly rise on the afternoons of the second and third day. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

CHAMBER NUMBER 1
DAY 3 OF 3 9-10-76

ETHANE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.293	0.030	0.018	0.048								
1.13	0.278	0.030	0.018	0.048								
2.13	0.265	0.026	0.018	0.044								
3.13	0.250	0.029	0.019	0.048								
4.13	0.235	0.028	0.020	0.048								
5.13	0.222	0.027	0.021	0.048								
6.13	0.209	0.028	0.024	0.051								
7.13	0.191	0.028	0.024	0.051								
8.13	0.160	0.010	0.024	0.033								
9.13	0.156	0.015	0.026	0.041								
10.13	0.140	0.018	0.028	0.046					0.139		0.000	
11.13	0.128	0.018	0.035	0.053								
12.13	0.161	0.021	0.046	0.067								
13.13	0.210											
14.13	0.264	0.015	0.049	0.064								
15.13	0.295	0.014	0.048	0.062								
16.13	0.302	0.015	0.045	0.060					0.235	0.032	0.000	
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	23.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	22.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	21.7	0.01	0.08			
8.13		0.00	0.60			
9.13		0.04	0.92			
10.13	20.6	0.15	4.20			
11.13		0.62	16.96			
12.13		0.83	55.84			
13.13	24.4	1.23	108.84			
14.13		1.10	181.60			
15.13		0.85	245.60			
16.13	24.4	0.47	293.56			
17.13		0.17	319.36			
18.13		0.03	328.44			
19.13	19.4	0.00	330.00			
20.13		0.00	330.00			
21.13		0.00	330.00			
22.13	14.4	0.00	330.00			
23.13		0.00	330.00			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 9- 8-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.003	0.011	0.014								
1.30	0.000	0.003	0.010	0.013								
2.30	0.000	0.003	0.007	0.011								
3.30	0.000	0.003	0.006	0.010								
4.30	0.000	0.002	0.006	0.009								
5.30	0.000	0.156	0.020	0.176								
6.30	0.000	0.155	0.021	0.176								
7.30	0.000	0.143	0.033	0.176								
8.30	0.001	0.107	0.071	0.178								
9.30	0.016	0.077	0.107	0.184								
10.30	0.049	0.049	0.126	0.175					0.068	0.127	0.000	
11.30	0.112	0.031	0.136	0.167								
12.30	0.214	0.029	0.130	0.159								
13.30	0.364	0.020	0.109	0.129								
14.30	0.510	0.015	0.096	0.111								
15.30	0.614	0.016	0.081	0.097								
16.30	0.653	0.019	0.071	0.090					*	0.109	0.000	
17.30	0.651	0.020	0.057	0.077								
18.30	0.627	0.013	0.045	0.058								
19.30	0.598	0.006	0.041	0.047								
20.30	0.576	0.005	0.039	0.044								
21.30	0.558	0.004	0.039	0.043								
22.30	0.545	0.003	0.036	0.040								
23.30	0.534	0.003	0.036	0.040								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	13.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	12.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.09	1.62			
7.30	13.3	0.37	12.06			
8.30		0.66	39.48			
9.30		0.93	83.94			
10.30	25.0	1.12	143.16			
11.30		1.24	212.52			
12.30		1.27	287.46			
13.30	30.6	1.20	362.40			
14.30		1.03	431.34			
15.30		0.80	489.00			
16.30	31.7	0.51	531.78			
17.30		0.21	556.98			
18.30		0.02	566.16			
19.30	26.1	0.00	567.00			
20.30		0.00	567.00			
21.30		0.00	567.00			
22.30	18.9	0.00	567.00			
23.30		0.00	567.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* Data suspect and discarded.

CHAMBER NUMBER 2
DAY 2 OF 3 9- 9-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.521	0.002	0.035	0.037								
1.30	0.511	0.002	0.035	0.037								
2.30	0.502	0.002	0.034	0.036								
3.30	0.491	0.002	0.033	0.035								
4.30	0.483	0.002	0.033	0.035								
5.30	0.476	0.003	0.031	0.034								
6.30	0.461	0.007	0.032	0.040								
7.30	0.448	0.006	0.033	0.040								
8.30	0.429	0.015	0.039	0.053					0.491	0.008	0.000	
9.30	0.425	0.024	0.045	0.068								
10.30	0.452	0.027	0.046	0.073								
11.30	0.502	0.026	0.048	0.074								
12.30	0.573	0.028	0.051	0.079								
13.30	0.651											
14.30	0.672	0.026	0.053	0.079					0.429	0.007	0.000	
15.30	0.666	0.028	0.057	0.084								
16.30	0.660	0.026	0.049	0.075								
17.30	0.638	0.027	0.044	0.071								
18.30	0.619	0.027	0.040	0.066								
19.30	0.599	0.019	0.039	0.058								
20.30	0.579	0.017	0.039	0.056								
21.30	0.561	0.015	0.034	0.049								
22.30	0.545	0.019	0.035	0.055								
23.30	0.526	0.019	0.035	0.055								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	18.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.04	0.72			
7.30	20.0	0.15	5.10			
8.30		0.49	20.22			
9.30		0.89	56.82			
10.30	26.7	1.09	113.82			
11.30		1.21	181.38			
12.30		1.25	254.70			
13.30	31.1	1.16	328.08			
14.30		0.93	393.54			
15.30		0.59	443.22			
16.30	31.7	0.32	473.76			
17.30		0.15	489.90			
18.30		0.04	496.92			
19.30	25.0	0.00	498.60			
20.30		0.00	498.60			
21.30		0.00	498.60			
22.30	23.9	0.00	498.60			
23.30		0.00	498.60			

% POSSIBLE MINUTES OF SUNSHINE 70

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* The NO, NO_2 and NO_x data from approximately 0000 EST, 9 Sept 76 until the end of the run are suspect but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. However, these effects are not seen for the simultaneous [NO_2] readings. Additionally, the [NO_2] levels unexpectedly rise on the afternoons of the second and third days. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 9-10-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.510	0.026	0.036	0.062								
1.30	0.493	0.026	0.039	0.064								
2.30	0.479	0.024	0.042	0.065								
3.30	0.462	0.026	0.046	0.072								
4.30	0.445	0.024	0.050	0.074								
5.30	0.428	0.022	0.056	0.078								
6.30	0.411	0.024	0.061	0.084								
7.30	0.387	0.026	0.063	0.089								
8.30	0.345	0.010	0.062	0.072								
9.30	0.334	0.014	0.063	0.077								
10.30	0.306	0.018	0.067	0.086								
11.30	0.290	0.019	0.078	0.097					0.253	0.020	0.000	
12.30	0.353	0.027	0.091	0.118								
13.30	0.421											
14.30	0.483	0.015	0.095	0.110								
15.30	0.512	0.014	0.093	0.107								
16.30	0.511	0.016	0.090	0.106								
17.30									0.358	0.019	0.000	
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	23.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	22.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	21.7	0.01	0.18			
8.30		0.00	0.60			
9.30		0.04	1.32			
10.30	20.6	0.15	5.70			
11.30		0.62	23.16			
12.30		0.83	64.14			
13.30	24.4	1.23	121.14			
14.30		1.10	192.60			
15.30		0.85	254.10			
16.30	24.4	0.47	298.26			
17.30		0.17	321.06			
18.30		0.03	328.74			
19.30	19.4	0.00	330.00			
20.30		0.00	330.00			
21.30		0.00	330.00			
22.30	14.4	0.00	330.00			
23.30		0.00	330.00			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 5 9- 8-76

ACETYLENE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.002	0.001	0.003								
1.47	0.000	0.002	0.001	0.003								
2.47	0.000	0.001	0.001	0.002								
3.47	0.000	0.000	0.000	0.000								
4.47	0.000	0.145	0.017	0.163								
5.47	0.000	0.144	0.017	0.161								
6.47	0.000	0.142	0.017	0.159								
7.47	0.000	0.139	0.018	0.157								
8.47	0.000	0.133	0.028	0.160								
9.47	0.000	0.114	0.050	0.165								
10.47	0.013	0.070	0.080	0.150					0.018	0.085	0.000	
11.47	0.075	0.033	0.084	0.118								
12.47	0.233	0.015	0.052	0.067								
13.47	0.396	0.012	0.027	0.039								
14.47	0.440	0.013	0.021	0.034								
15.47	0.449	0.016	0.019	0.035								
16.47	0.436	0.014	0.018	0.032					*	*	0.000	
17.47	0.414	0.011	0.017	0.028								
18.47	0.388	0.006	0.013	0.019								
19.47	0.368	0.004										
20.47	0.352	0.004	0.009	0.013								
21.47	0.339	0.003	0.009	0.012								
22.47	0.325	0.003	0.009	0.012								
23.47	0.314	0.002	0.009	0.011								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	13.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.09	2.52			
7.47	13.3	0.37	15.76			
8.47		0.66	46.08			
9.47		0.93	93.24			
10.47	25.0	1.12	154.36			
11.47		1.24	224.92			
12.47		1.27	300.16			
13.47	30.6	1.20	374.40			
14.47		1.03	441.64			
15.47		0.80	497.00			
16.47	31.7	0.51	536.88			
17.47		0.21	559.08			
18.47		0.02	566.36			
19.47	26.1	0.00	567.00			
20.47		0.00	567.00			
21.47		0.00	567.00			
22.47	18.9	0.00	567.00			
23.47		0.00	567.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 9- 9-76

ACETYLENE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.307	0.002	0.007	0.010								
1.47	0.295	0.001	0.007	0.009								
2.47	0.288	0.001	0.007	0.009								
3.47	0.278	0.001	0.006	0.007								
4.47	0.268	0.002	0.006	0.009								
5.47	0.262	0.003	0.006	0.010								
6.47	0.248	0.007	0.007	0.015								
7.47	0.235	0.007	0.010	0.017								
8.47	0.219	0.014	0.013	0.027					0.299	0.013	0.000	
9.47	0.224											
10.47	0.248	0.024	0.017	0.041								
11.47	0.278											
12.47	0.321	0.021	0.019	0.041								
13.47	0.358											
14.47	0.363	0.019	0.024	0.043					0.293	0.018	0.000	
15.47	0.350	0.022	0.028	0.050								
16.47	0.333	0.018	0.024	0.042								
17.47	0.312	0.019	0.019	0.039								
18.47	0.295	0.021	0.015	0.036								
19.47	0.281	0.021	0.013	0.034								
20.47	0.267	0.018	0.012	0.030								
21.47	0.257	0.016	0.012	0.028								
22.47	0.245	0.021	0.012	0.033								
23.47	0.229	0.022	0.012	0.034								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.04	1.12			
7.47	20.0	0.15	6.60			
8.47		0.49	25.12			
9.47		0.89	65.72			
10.47	26.7	1.09	124.72			
11.47		1.21	193.48			
12.47		1.25	267.20			
13.47	31.1	1.16	339.68			
14.47		0.93	402.84			
15.47		0.59	449.12			
16.47	31.7	0.32	476.96			
17.47		0.15	491.40			
18.47		0.04	497.32			
19.47	25.0	0.00	498.60			
20.47		0.00	498.60			
21.47		0.00	498.60			
22.47	23.9	0.00	498.60			
23.47		0.00	498.60			

% POSSIBLE MINUTES OF SUNSHINE 70

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* The NO, NO_2 and NO_x data from approximately 0000 EST, 9 Sept 76 until the end of the run are suspect but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. However, these effects are not seen for the simultaneous [NO_2] readings. Additionally, the [NO_2] levels unexpectedly rise on the afternoons of the second and third days. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

CHAMBER NUMBER 3
DAY 3 OF 3 9-10-76

ACETYLENE 0% DILUTION
TARGET INITIAL HC/NOX: 8.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.215	0.027	0.011	0.037								
1.47	0.202	0.027	0.012	0.039								
2.47	0.190	0.026	0.012	0.037								
3.47	0.180	0.027	0.013	0.040								
4.47	0.167	0.025	0.014	0.039								
5.47	0.158	0.024	0.015	0.039								
6.47	0.148	0.021	0.017	0.039								
7.47	0.136	0.027	0.017	0.044								
8.47	0.119	0.011	0.017	0.028								
9.47	0.113	0.014	0.017	0.031								
10.47	0.104	0.017	0.019	0.036					0.064	0.018	0.000	
11.47	0.104	0.021	0.025	0.046								
12.47	0.132	0.030	0.029	0.059								
13.47	0.159											
14.47	0.172	0.015	0.026	0.041								
15.47	0.172	0.015	0.024	0.039								
16.47	0.160	0.014	0.021	0.035					0.132	0.022	0.000	
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	23.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	22.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	21.7	0.01	0.28			
8.47		0.00	0.60			
9.47		0.04	1.72			
10.47	20.6	0.15	7.20			
11.47		0.62	29.56			
12.47		0.83	72.44			
13.47	24.4	1.23	133.44			
14.47		1.10	203.60			
15.47		0.85	262.60			
16.47	24.4	0.47	302.96			
17.47		0.17	322.76			
18.47		0.05	329.04			
19.47	19.4	0.00	330.00			
20.47		0.00	330.00			
21.47		0.00	330.00			
22.47	14.4	0.00	330.00			
23.47		0.00	330.00			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 9- 8-76

CONTROL-NOX INJ. 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.002	0.004	0.006								
1.63	0.000	0.001	0.004	0.005								
2.63	0.000	0.001	0.003	0.004								
3.63	0.000	0.001	0.003	0.004								
4.63	0.000	0.150	0.022	0.172								
5.63	0.000	0.150	0.024	0.173								
6.63	0.000	0.149	0.024	0.172								
7.63	0.000	0.147	0.024	0.170								
8.63	0.000	0.142	0.027	0.169								
9.63	0.000	0.149	0.031	0.180								
10.63	0.000	0.140	0.039	0.179					0.009	0.047	0.000	
11.63	0.000	0.123	0.047	0.170								
12.63	0.000	0.109	0.059	0.168								
13.63	0.007	0.083	0.064	0.148								
14.63	0.011	0.065	0.077	0.142								
15.63	0.016	0.053	0.082	0.136								
16.63	0.019	0.049	0.087	0.136					0.008	0.047 *	0.000	
17.63	0.014	0.039	0.092	0.130								
18.63	0.002	0.017	0.104	0.121								
19.63	0.000	0.010	0.107	0.117								
20.63	0.000	0.009	0.106	0.114								
21.63	0.000	0.007	0.106	0.113								
22.63	0.000	0.007	0.105	0.112								
23.63	0.000	0.006	0.105	0.111								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	13.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.09	3.42			
7.63	13.3	0.37	19.46			
8.63		0.66	52.68			
9.63		0.93	102.54			
10.63	25.0	1.12	165.56			
11.63		1.24	237.32			
12.63		1.27	312.86			
13.63	30.6	1.20	386.40			
14.63		1.03	451.94			
15.63		0.80	505.00			
16.63	31.7	0.51	541.98			
17.63		0.21	561.18			
18.63		0.02	566.56			
19.63	26.1	0.00	567.00			
20.63		0.00	567.00			
21.63		0.00	567.00			
22.63	18.9	0.00	567.00			
23.63		0.00	567.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 31.7 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 3 9- 9-76

CONTROL-NOX INJ. 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 * (PPM)	NOX * (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.006	0.104	0.110								
1.63	0.000	0.005	0.103	0.108								
2.63	0.000	0.005	0.102	0.107								
3.63	0.000	0.005	0.101	0.106								
4.63	0.000	0.006	0.098	0.105								
5.63	0.000	0.007	0.095	0.103								
6.63	0.009	0.011	0.089	0.099								
7.63	0.015	0.025	0.083	0.108								
8.63	0.028	0.037	0.075	0.112					**	0.069	0.000	
9.63	0.047											
10.63	0.076	0.035	0.071	0.106								
11.63	0.107											
12.63	0.150	0.036	0.059	0.095								
13.63	0.211	0.032	0.052	0.084								
14.63												
15.63	0.245	0.034	0.040	0.074					0.154	0.082 ***	0.000	
16.63	0.245	0.030	0.034	0.064								
17.63	0.235	0.032	0.030	0.062								
18.63	0.224	0.029	0.024	0.052								
19.63	0.210	0.025	0.019	0.044								
20.63	0.198	0.018	0.016	0.034								
21.63	0.190	0.019	0.015	0.034								
22.63	0.181	0.025	0.013	0.037								
23.63	0.171	0.026	0.013	0.039								

** Data suspect and discarded.
*** Data suspect but retained.

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.04	1.52			
7.63	20.0	0.15	8.10			
8.63		0.49	30.02			
9.63		0.89	74.62			
10.63	26.7	1.09	135.62			
11.63		1.21	205.58			
12.63		1.25	279.70			
13.63	31.1	1.16	351.28			
14.63		0.93	412.14			
15.63		0.59	455.02			
16.63	31.7	0.32	480.16			
17.63		0.15	492.90			
18.63		0.04	497.72			
19.63	25.0	0.00	498.60			
20.63		0.00	498.60			
21.63		0.00	498.60			
22.63	23.9	0.00	498.60			
23.63		0.00	498.60			

% POSSIBLE MINUTES OF SUNSHINE 70

RDU AIRPORT MAXIMUM TEMPERATURE 32.2 CENT

* The NO, NO_2 and NO_x data from approximately 0000 EST, 9 Sept 76 until the end of the run are suspect but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. However, these effects are not seen for the simultaneous [NO_2] readings. Additionally, the [NO_2] levels unexpectedly rise on the afternoons of the second and third days. It is believed that these effects are related to a humidity/sampling line probelm rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 3 9-10-76

CONTROL-NOX INJ. 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.161	0.029	0.013	0.042								
1.63	0.154	0.028	0.013	0.041								
2.63	0.148	0.028	0.013	0.041								
3.63	0.139	0.028	0.014	0.042								
4.63	0.130	0.026	0.015	0.041								
5.63	0.123	0.027	0.015	0.042								
6.63	0.114	0.026	0.015	0.041								
7.63	0.107	0.028	0.015	0.043								
8.63	0.093	0.012	0.016	0.028								
9.63	0.087	0.015	0.017	0.032								
10.63	0.078	0.017	0.020	0.037					0.042*	0.014	0.000	
11.63	0.086	0.022	0.026	0.048								
12.63	0.118											
13.63	0.155											
14.63	0.181	0.015	0.026	0.041								
15.63	0.190	0.016	0.024	0.040								
16.63	0.186	0.017	0.024	0.041					0.072*	0.012	0.000	
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	23.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	22.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	21.7	0.01	0.38			
8.63		0.00	0.60			
9.63		0.04	2.16			
10.63	20.6	0.15	8.70			
11.63		0.62	55.56			
12.63		0.83	80.74			
13.63	24.4	1.23	145.74			
14.63		1.10	214.60			
15.63		0.85	271.10			
16.63	24.4	0.47	307.66			
17.63		0.17	324.46			
18.63		0.03	329.34			
19.63	19.4	0.00	330.00			
20.63		0.00	330.00			
21.63		0.00	330.00			
22.63	18.4	0.00	330.00			
23.63		0.00	330.00			

% POSSIBLE MINUTES OF SUNSHINE 49

RDU AIRPORT MAXIMUM TEMPERATURE 26.1 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000											
1.13	0.000	0.003	0.003	0.006								
2.13	0.000	0.005	0.001	0.006								
3.13	0.000	0.776	0.000	0.776								
4.13	0.000	0.831	0.215	1.046								
5.13	0.000	0.841	0.225	1.065								
6.13	0.000	0.818	0.235	1.053								
7.13	0.000	0.750	0.293	1.043								
8.13	0.000	0.506	0.492	0.998					*	0.632	0.122	
9.13	0.003	0.250	0.681	0.932								
10.13	0.026	0.120	0.741	0.861								
11.13	0.087	0.048	0.727	0.775								
12.13	0.189	0.021	0.662	0.683								
13.13	0.289	0.012	0.569	0.581					0.485	0.385	0.208	
14.13	0.383	0.010	0.476	0.486								
15.13	0.420	0.009	0.385	0.394								
16.13	0.431	0.009	0.309	0.318								
17.13	0.409	0.009	0.229	0.237								
18.13	0.349	0.007	0.136	0.143								
19.13	0.312	0.006	0.096	0.103								
20.13	0.297	0.006	0.087	0.093								
21.13	0.288	0.006	0.084	0.091								
22.13	0.277	0.006	0.081	0.088								
23.13	0.267	0.006	0.079	0.086								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	15.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	12.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.06	0.48			
7.13	15.0	0.33	6.24			
8.13		0.61	28.28			
9.13		0.71	65.68			
10.13	24.4	1.07	111.16			
11.13		1.20	176.40			
12.13		1.19	248.32			
13.13	27.8	1.07	318.76			
14.13		0.79	380.72			
15.13		0.54	426.12			
16.13	27.8	0.36	457.08			
17.13		0.15	477.00			
18.13		0.01	484.88			
19.13	22.2	0.00	485.40			
20.13		0.00	485.40			
21.13		0.00	485.40			
22.13	19.4	0.00	485.40			
23.13		0.00	485.40			

% POSSIBLE MINUTES OF SUNSHINE 83

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 5 9-14-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.257	0.007	0.077	0.084								
1.13	0.248	0.007	0.076	0.083								
2.13	0.240	0.007	0.075	0.082								
3.13	0.232	0.007	0.073	0.080								
4.13	0.225	0.007	0.072	0.079								
5.13	0.217	0.009	0.071	0.079								
6.13	0.210	0.009	0.068	0.077								
7.13	0.200	0.009	0.070	0.078								
8.13	0.191	0.009	0.071	0.079					0.235	0.021	0.157	
9.13	0.190	0.005	0.071	0.076								
10.13	0.214	0.005	0.070	0.075								
11.13	0.225	0.005	0.068	0.074								
12.13	0.230	0.005	0.068	0.074								
13.13	0.229	0.005	0.065	0.071					0.262	0.035	0.093	
14.13	0.228	0.005	0.063	0.068								
15.13	0.224	0.005	0.062	0.067								
16.13	0.218	0.003	0.061	0.064								
17.13	0.212	0.004	0.059	0.063								
18.13	0.203	0.004	0.057	0.061								
19.13	0.197	0.005	0.053	0.059								
20.13	0.191	0.004	0.051	0.056								
21.13	0.185	0.005	0.049	0.055								
22.13	0.179	0.005	0.048	0.053								
23.13	0.174	0.005	0.047	0.052								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.7	0.00	0.00			
5.13		0.00	0.00			
6.13		0.06	0.48			
7.13	16.7	0.17	4.96			
8.13		0.33	16.44			
9.13		0.54	37.92			
10.13	22.8	0.41	69.28			
11.13		0.35	93.40			
12.13		0.24	113.52			
13.13	22.8	0.24	127.92			
14.13		0.24	142.32			
15.13		0.19	155.52			
16.13	22.2	0.12	167.16			
17.13		0.02	173.56			
18.13		0.00	174.60			
19.13	21.7	0.00	174.60			
20.13		0.00	174.60			
21.13		0.00	174.60			
22.13	20.6	0.00	174.60			
23.13		0.00	174.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

* The [NO] data from approximately 0900 EST, 14 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

CHAMBER NUMBER 1
DAY 3 OF 3 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.171	0.005	0.046	0.051								
1.13	0.165	0.005	0.045	0.050								
2.13	0.160	0.005	0.044	0.049								
3.13	0.155	0.005	0.043	0.048								
4.13	0.150	0.006	0.041	0.047								
5.13	0.147	0.007	0.040	0.047								
6.13	0.140	0.007	0.040	0.047								
7.13	0.135	0.007	0.040	0.047								
8.13	0.129	0.009	0.039	0.047								
9.13	0.126	0.007	0.039	0.046					0.140	0.010	0.076	
10.13	0.127	0.010	0.040	0.049								
11.13	0.125	0.011	0.040	0.050								
12.13	0.124	0.011	0.040	0.050								
13.13	0.150	0.013	0.041	0.053					0.193	0.015	0.064	
14.13	0.174	0.017	0.041	0.058								
15.13												
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	21.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	20.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	20.6	0.06	1.08			
8.13		0.25	6.20			
9.13		0.22	20.96			
10.13	22.2	0.17	33.76			
11.13		0.18	44.04			
12.13		0.58	58.04			
13.13	25.6	0.59	92.92			
14.13		0.75	129.60			
15.13		0.53	172.84			
16.13	26.1	0.09	201.12			
17.13		0.11	206.68			
18.13		0.01	212.48			
19.13	23.3	0.00	213.00			
20.13		0.00	213.00			
21.13		0.00	213.00			
22.13	22.8	0.00	213.00			
23.13		0.00	213.00			

% POSSIBLE MINUTES OF SUNSHINE 7

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 3 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000											
1.30	0.000	0.006	0.007	0.014								
2.30	0.000	0.006	0.006	0.013								
3.30	0.000	0.604	0.116	0.720								
4.30	0.000	0.595	0.117	0.711								
5.30	0.000	0.589	0.154	0.743								
6.30	0.000	0.574	0.164	0.738								
7.30	0.000	0.446	0.273	0.719								
8.30	0.024	0.119	0.537	0.656					*	0.419	0.179	
9.30	0.113	0.034	0.555	0.589								
10.30	0.257	0.017	0.503	0.520								
11.30	0.467	0.011	0.413	0.424								
12.30	0.694	0.011	0.316	0.326								
13.30	0.873	0.010	0.238	0.248					1.058	0.043	0.225	
14.30	0.951	0.009	0.195	0.203								
15.30	0.937	0.009	0.171	0.180								
16.30	0.908	0.009	0.156	0.165								
17.30	0.870	0.007	0.141	0.149								
18.30	0.831	0.007	0.128	0.136								
19.30	0.802	0.007	0.121	0.128								
20.30	0.781	0.007	0.117	0.124								
21.30	0.764	0.006	0.111	0.118								
22.30	0.748	0.007	0.108	0.116								
23.30	0.727	0.007	0.105	0.112								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	15.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	12.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.06	1.08			
7.30	15.0	0.35	9.54			
8.30		0.61	34.38			
9.30		0.71	72.78			
10.30	24.4	1.07	121.86			
11.30		1.20	188.40			
12.30		1.19	260.22			
13.30	27.8	1.07	329.46			
14.30		0.79	388.62			
15.30		0.54	431.52			
16.30	27.8	0.36	460.68			
17.30		0.15	478.50			
18.30		0.01	484.98			
19.30	22.2	0.00	485.40			
20.30		0.00	485.40			
21.30		0.00	485.40			
22.30	19.4	0.00	485.40			
23.30		0.00	485.40			

% POSSIBLE MINUTES OF SUNSHINE 83

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

* Data suspect and discarded.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 3 9-14-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.722	0.007	0.103	0.110								
1.30	0.696	0.007	0.099	0.107								
2.30	0.682	0.007	0.097	0.105								
3.30	0.666	0.007	0.095	0.103								
4.30	0.653	0.009	0.093	0.102								
5.30	0.640	0.007	0.091	0.098								
6.30	0.622	0.009	0.089	0.097								
7.30	0.604	0.009	0.090	0.098								
8.30	0.578	0.009	0.089	0.097								
9.30	0.548	0.006	0.091	0.097					0.641	0.017	0.300	
10.30	0.533	0.006	0.089	0.095								
11.30	0.515	0.005	0.086	0.091								
12.30	0.503	0.005	0.083	0.089								
13.30	0.486	0.005	0.080	0.086								
14.30	0.472	0.005	0.078	0.083					0.552	0.024	0.138	
15.30	0.458	0.005	0.076	0.081								
16.30	0.444	0.004	0.074	0.078								
17.30	0.432	0.004	0.070	0.074								
18.30	0.420	0.004	0.066	0.071								
19.30	0.411	0.005	0.063	0.068								
20.30	0.403	0.004	0.060	0.064								
21.30	0.396	0.005	0.058	0.063								
22.30	0.387	0.005	0.057	0.062								
23.30	0.380	0.005	0.055	0.060								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	16.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.06	1.08			
7.30	16.7	0.17	6.66			
8.30		0.33	19.74			
9.30		0.54	43.32			
10.30	22.8	0.41	75.58			
11.30		0.35	96.90			
12.30		0.24	115.92			
13.30	22.8	0.24	130.32			
14.30		0.24	144.72			
15.30		0.19	158.22			
16.30	22.2	0.12	168.36			
17.30		0.02	173.76			
18.30		0.00	174.60			
19.30	21.7	0.00	174.60			
20.30		0.00	174.60			
21.30		0.00	174.60			
22.30	20.6	0.00	174.60			
23.30		0.00	174.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

* The [NO] data from approximately 0900 EST, 14 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 3 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.372	0.005	0.053	0.059								
1.30	0.364	0.005	0.052	0.058								
2.30	0.356	0.005	0.049	0.055								
3.30	0.344	0.006	0.047	0.053								
4.30	0.336	0.009	0.045	0.053								
5.30	0.322	0.009	0.043	0.051								
6.30	0.308	0.009	0.040	0.048								
7.30	0.293	0.009	0.041	0.049								
8.30	0.277	0.010	0.042	0.051								
9.30	0.257	0.011	0.050	0.061								
10.30	0.243	0.012	0.056	0.067					0.270	0.015	0.068	
11.30	0.229	0.013	0.060	0.073								
12.30	0.221	0.013	0.065	0.078								
13.30	0.247	0.016	0.067	0.083								
14.30	0.276	0.019	0.066	0.086					0.309	0.024	0.047	
15.30												
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	21.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	20.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	20.6	0.06	1.68			
8.30		0.25	8.70			
9.30		0.22	23.16			
10.30	22.2	0.17	35.46			
11.30		0.18	45.84			
12.30		0.58	63.84			
13.30	25.6	0.59	98.82			
14.30		0.75	137.10			
15.30		0.53	178.14			
16.30	26.1	0.09	202.02			
17.30		0.11	207.78			
18.30		0.01	212.58			
19.30	23.3	0.00	213.00			
20.30		0.00	213.00			
21.30		0.00	213.00			
22.30	22.8	0.00	213.00			
23.30		0.00	213.00			

% POSSIBLE MINUTES OF SUNSHINE 7

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 1 OF 5 9-13-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000											
1.47	0.000	0.003	0.001	0.004								
2.47	0.000	0.003	0.001	0.004								
3.47	0.000	0.198	0.051	0.249								
4.47	0.000	0.196	0.051	0.247								
5.47	0.000	0.195	0.051	0.246								
6.47	0.000	0.179	0.065	0.244								
7.47	0.122	0.006	0.194	0.200								
8.47	0.279	0.009	0.168	0.176								
9.47	0.381	0.009	0.156	0.165								
10.47	0.479	0.007	0.150	0.157					0.510*	0.044	0.250	
11.47	0.590	0.006	0.136	0.142								
12.47	0.679	0.006	0.122	0.128								
13.47	0.718	0.006	0.109	0.116								
14.47	0.719	0.006	0.097	0.104								
15.47	0.701	0.006	0.090	0.096					0.769	0.037	0.207	
16.47	0.675	0.006	0.084	0.091								
17.47	0.644	0.005	0.077	0.082								
18.47	0.611	0.006	0.067	0.074								
19.47	0.588	0.006	0.064	0.071								
20.47	0.570	0.006	0.062	0.068								
21.47	0.557	0.006	0.059	0.065								
22.47	0.544	0.006	0.058	0.064								
23.47	0.530	0.005	0.056	0.061								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	15.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.06	1.68			
7.47	15.0	0.33	12.84			
8.47		0.61	40.48			
9.47		0.71	79.88			
10.47	24.4	1.07	132.56			
11.47		1.20	200.40			
12.47		1.19	272.12			
13.47	27.8	1.07	340.16			
14.47		0.79	396.52			
15.47		0.54	436.92			
16.47	27.8	0.36	464.28			
17.47		0.15	480.00			
18.47		0.01	485.08			
19.47	22.2	0.00	485.40			
20.47		0.00	485.40			
21.47		0.00	485.40			
22.47	19.4	0.00	485.40			
23.47		0.00	485.40			

% POSSIBLE MINUTES OF SUNSHINE 83

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 5 9-14-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.519	0.005	0.055	0.060								
1.47	0.507	0.005	0.053	0.059								
2.47	0.497	0.005	0.051	0.057								
3.47	0.486	0.006	0.051	0.058								
4.47	0.476	0.006	0.050	0.057								
5.47	0.466	0.005	0.049	0.055								
6.47	0.456	0.006	0.048	0.055								
7.47	0.440	0.007	0.048	0.056								
8.47	0.420	0.007	0.048	0.056								
9.47	0.399	0.005	0.048	0.053					0.434		0.140	
10.47	0.388	0.005	0.048	0.053								
11.47	0.373	0.004	0.047	0.051								
12.47	0.358	0.004	0.046	0.050								
13.47	0.343	0.005	0.045	0.050								
14.47	0.332	0.005	0.044	0.049					0.353	0.018	0.172	
15.47	0.318	0.004	0.043	0.047								
16.47	0.305	0.003	0.042	0.045								
17.47	0.293	0.004	0.039	0.043								
18.47	0.283	0.004	0.037	0.042								
19.47	0.276	0.004	0.034	0.039								
20.47	0.268	0.004	0.034	0.039								
21.47	0.261	0.004	0.032	0.036								
22.47	0.256	0.004	0.031	0.035								
23.47	0.248	0.004	0.030	0.034								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	16.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.06	1.68			
7.47	16.7	0.17	8.36			
8.47		0.33	23.04			
9.47		0.54	48.72			
10.47	22.8	0.41	77.48			
11.47		0.35	100.40			
12.47		0.24	118.52			
13.47	22.8	0.24	132.72			
14.47		0.24	147.12			
15.47		0.19	160.12			
16.47	22.2	0.12	169.56			
17.47		0.02	175.96			
18.47		0.00	174.60			
19.47	21.7	0.00	174.60			
20.47		0.00	174.60			
21.47		0.00	174.60			
22.47	20.6	0.00	174.60			
23.47		0.00	174.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

* The [NO] data from approximately 0900 EST, 14 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.242	0.005	0.029	0.034								
1.47	0.235	0.005	0.028	0.033								
2.47	0.227	0.005	0.027	0.032								
3.47	0.219	0.005	0.026	0.031								
4.47	0.212	0.007	0.024	0.031								
5.47	0.202	0.009	0.021	0.030								
6.47	0.188	0.009	0.020	0.029								
7.47	0.173	0.009	0.019	0.028								
8.47	0.160	0.011	0.020	0.031								
9.47	0.148	0.011	0.025	0.035								
10.47	0.138	0.012	0.027	0.039					0.164	0.008	0.010	
11.47	0.129	0.013	0.029	0.042								
12.47	0.132	0.015	0.032	0.047								
13.47	0.145	0.017	0.033	0.050								
14.47	0.166	0.020	0.033	0.053					0.168	0.024	0.040	
15.47												
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	21.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	20.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	20.6	0.06	2.28			
8.47		0.25	11.20			
9.47		0.22	25.36			
10.47	22.2	0.17	37.16			
11.47		0.18	47.64			
12.47		0.58	69.64			
13.47	25.6	0.59	104.72			
14.47		0.75	144.60			
15.47		0.53	185.44			
16.47	26.1	0.09	202.92			
17.47		0.11	208.88			
18.47		0.01	212.68			
19.47	23.3	0.00	213.00			
20.47		0.00	213.00			
21.47		0.00	213.00			
22.47	22.8	0.00	213.00			
23.47		0.00	213.00			

% POSSIBLE MINUTES OF SUNSHINE 7

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 3 9-13-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOx (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000											
1.63	0.000	0.004	0.003	0.007								
2.63	0.000	0.004	0.003	0.007								
3.63	0.000	0.087	0.022	0.109								
4.63	0.000	0.086	0.022	0.108								
5.63	0.000	0.086	0.022	0.108								
6.63	0.000	0.083	0.022	0.106								
7.63	0.001	0.071	0.037	0.108								
8.63	0.015	0.042	0.066	0.108								
9.63	0.036	0.026	0.076	0.102					0.051	0.085	0.156	
10.63	0.067	0.017	0.075	0.092								
11.63	0.107	0.011	0.071	0.081								
12.63	0.144	0.011	0.060	0.071								
13.63	0.184	0.010	0.051	0.061								
14.63	0.210	0.009	0.044	0.052					0.179	0.045	0.123	
15.63	0.219	0.009	0.040	0.048								
16.63	0.219	0.009	0.035	0.044								
17.63	0.213	0.009	0.032	0.041								
18.63	0.200	0.007	0.026	0.033								
19.63	0.191	0.007	0.021	0.029								
20.63	0.184	0.007	0.018	0.026								
21.63	0.179	0.007	0.017	0.025								
22.63	0.171	0.007	0.017	0.025								
23.63	0.165	0.007	0.016	0.024								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	15.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.06	2.28			
7.63	15.0	0.33	16.14			
8.63		0.61	46.58			
9.63		0.71	86.98			
10.63	24.4	1.07	143.26			
11.63		1.20	212.40			
12.63		1.19	284.02			
13.63	27.8	1.07	350.86			
14.63		0.79	404.42			
15.63		0.54	442.52			
16.63	27.8	0.36	467.88			
17.63		0.15	481.50			
18.63		0.01	485.18			
19.63	22.2	0.00	485.40			
20.63		0.00	485.40			
21.63		0.00	485.40			
22.63	19.4	0.00	485.40			
23.63		0.00	485.40			

% POSSIBLE MINUTES OF SUNSHINE 83

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

CHAMBER NUMBER 4
DAY 2 OF 5 9-14-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.160	0.007	0.015	0.022								
1.63	0.155	0.006	0.015	0.021								
2.63	0.150	0.007	0.015	0.022								
3.63	0.145	0.007	0.015	0.022								
4.63	0.139	0.007	0.014	0.021								
5.63	0.134	0.007	0.014	0.021								
6.63	0.127	0.007	0.016	0.024								
7.63	0.121	0.009	0.019	0.028								
8.63	0.118	0.010	0.021	0.031								
9.63	0.124	0.007	0.022	0.030					0.129	0.020	0.046	
10.63	0.132	0.006	0.022	0.029								
11.63	0.136	0.006	0.024	0.030								
12.63	0.139	0.006	0.024	0.030								
13.63	0.139	0.006	0.022	0.029								
14.63	0.137	0.006	0.022	0.029					0.143	0.014	0.027	
15.63	0.135	0.006	0.022	0.029								
16.63	0.132	0.005	0.021	0.027								
17.63	0.127	0.005	0.020	0.026								
18.63	0.123	0.005	0.019	0.025								
19.63	0.120	0.005	0.017	0.022								
20.63	0.117	0.005	0.016	0.021								
21.63	0.115	0.005	0.016	0.021								
22.63	0.110	0.005	0.016	0.021								
23.63	0.107	0.006	0.015	0.021								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.06	2.28			
7.63	16.7	0.17	10.06			
8.63		0.33	26.54			
9.63		0.54	54.12			
10.63	22.8	0.41	81.58			
11.63		0.35	103.90			
12.63		0.24	120.72			
13.63	22.8	0.24	135.12			
14.63		0.24	149.52			
15.63		0.19	162.02			
16.63	22.2	0.12	170.76			
17.63		0.02	174.16			
18.63		0.00	174.60			
19.63	21.7	0.00	174.60			
20.63		0.00	174.60			
21.63		0.00	174.60			
22.63	20.6	0.00	174.60			
23.63		0.00	174.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 23.9 CENT

* The [NO] data from approximately 0900 EST, 14 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rather than gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 5 9-15-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.105	0.006	0.015	0.021								
1.63	0.103	0.006	0.015	0.021								
2.63	0.098	0.006	0.014	0.020								
3.63	0.096	0.006	0.014	0.020								
4.63	0.094	0.007	0.014	0.021								
5.63	0.091	0.007	0.014	0.021								
6.63	0.088	0.007	0.014	0.021								
7.63	0.084	0.007	0.014	0.021								
8.63	0.081	0.009	0.015	0.024								
9.63	0.081	0.010	0.016	0.026								
10.63	0.081	0.011	0.016	0.027					0.077	0.010	0.027	
11.63	0.081	0.013	0.017	0.030								
12.63	0.083	0.013	0.018	0.031								
13.63	0.106	0.017	0.019	0.036								
14.63									0.112	0.019	0.122	
15.63												
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	21.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	20.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.58			
7.63	20.6	0.06	2.88			
8.63		0.25	13.70			
9.63		0.22	27.56			
10.63	22.2	0.17	38.86			
11.63		0.18	49.44			
12.63		0.58	75.44			
13.63	25.6	0.59	110.62			
14.63		0.75	152.10			
15.63		0.53	188.74			
16.63	26.1	0.09	203.82			
17.63		0.11	209.98			
18.63		0.01	212.78			
19.63	23.3	0.00	213.00			
20.63		0.00	213.00			
21.63		0.00	213.00			
22.63	22.8	0.00	213.00			
23.63		0.00	213.00			

% POSSIBLE MINUTES OF SUNSHINE 7

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 2 9-20-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.006	0.001	0.007								
1.13	0.000	0.005	0.001	0.006								
2.13	0.000	0.005	0.001	0.006								
3.13	0.000	0.005	0.001	0.006								0
4.13	0.000	0.170	0.040	0.210								
5.13	0.000	0.169	0.039	0.207								
6.13	0.000	0.168	0.040	0.207								
7.13	0.000	0.165	0.047	0.212								
8.80	0.002	0.109	0.091	0.200								
9.47	0.006	0.086	0.118	0.203								
10.13	0.016	0.066	0.134	0.200					0.051	0.145	0.000	2150
11.13	0.041	0.039	0.152	0.190								
12.13	0.066	0.020	0.156	0.176								
13.13	0.112	0.018	0.147	0.165								
14.13	0.151	0.015	0.138	0.153					0.250*	0.172	0.048	
15.13	0.185	0.013	0.127	0.140								600
16.13	0.195	0.013	0.113	0.126								
17.13	0.186	0.012	0.096	0.108								
18.13	0.164	0.012	0.065	0.077								
19.13	0.144	0.011	0.041	0.051								
20.13	0.132	0.012	0.031	0.043								
21.13	0.125	0.012	0.027	0.039								
22.13	0.119	0.012	0.025	0.036								
23.13	0.112	0.012	0.024	0.035								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.7	0.00	0.00			
5.13		0.00	0.00			
6.13		0.09	0.72			
7.13	15.6	0.22	7.16			
8.80		0.30	53.00			
9.47		0.64	54.52			
10.13	23.3	0.96	82.68			
11.13		0.96	140.28			
12.13		0.87	197.16			
13.13	27.8	0.78	248.64			
14.13		0.65	294.40			
15.13		0.59	332.92			
16.13	27.8	0.22	365.36			
17.13		0.09	377.52			
18.13		0.01	382.28			
19.13	23.9	0.00	382.80			
20.13		0.00	382.80			
21.13		0.00	382.80			
22.13	22.2	0.00	382.80			
23.13		0.00	382.80			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 2 9-21-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.107	0.011	0.022	0.033								
1.13	0.103	0.011	0.022	0.033								
2.13	0.096	0.012	0.022	0.034								
3.13	0.091	0.012	0.022	0.034								
4.13	0.086	0.012	0.025	0.036								
5.13	0.080	0.011	0.026	0.036								
6.13	0.075	0.011	0.028	0.039								
7.13	0.068	0.011	0.036	0.047								
8.47	0.065	0.007	0.049	0.057					0.102	0.035	0.000	
9.13	0.076	0.010	0.056	0.065								210
10.13	0.112	0.012	0.057	0.068								
11.13	0.151	0.013	0.057	0.070								
12.13	0.198	0.013	0.057	0.070								
13.13	0.251	0.013	0.056	0.068					0.385	0.029	0.003	190
14.13	0.286	0.013	0.055	0.067								
15.13	0.309	0.015	0.052	0.067								
16.13	0.310	0.013	0.049	0.062								
17.13	0.301	0.014	0.045	0.059								
18.13	0.289	0.015	0.040	0.055								
19.13	0.278	0.015	0.036	0.051								
20.13	0.266	0.015	0.035	0.050								
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.9	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	18.9	0.00	0.00			
5.13		0.00	0.00			
6.13		0.02	0.16			
7.13	18.9	0.05	1.60			
8.47		0.22	10.36			
9.13		0.32	19.96			
10.13	21.7	0.50	40.60			
11.13		0.72	72.36			
12.13		0.82	116.36			
13.13	25.0	0.71	164.68			
14.13		0.74	207.52			
15.13		0.45	249.60			
16.13	27.2	0.32	275.56			
17.13		0.01	292.28			
18.13		0.00	292.80			
19.13	21.7	0.00	292.80			
20.13		0.00	292.80			
21.13		0.00	292.80			
22.13	17.2	0.00	292.80			
23.13		0.00	292.80			

% POSSIBLE MINUTES OF SUNSHINE 38

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* The [NO] data from approximately 0828 EST 21 September 76 until th end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to humidity/sampling line problem rather than to gas-phase chemical reactions.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2237

CHAMBER NUMBER 2
DAY 1 OF 2 9-20-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.012	0.004	0.016								
1.30	0.000	0.013	0.003	0.016								
2.30	0.000	0.013	0.003	0.016								
3.30	0.000	0.012	0.003	0.015								0
4.30	0.000	0.175	0.040	0.215								
5.30	0.000	0.175	0.040	0.215								
6.30	0.000	0.173	0.042	0.215								
7.30	0.000	0.161	0.052	0.214								
8.97	0.009	0.091	0.114	0.205								
9.63	0.017	0.071	0.133	0.203								
10.30	0.032	0.053	0.148	0.201					0.061	0.159	0.040	1300
11.30	0.071	0.033	0.158	0.191								
12.30	0.109	0.025	0.158	0.183								
13.30	0.168	0.018	0.153	0.171								
14.30	0.215	0.017	0.143	0.160					0.286	0.128	0.031	
15.30	0.257	0.017	0.132	0.149								1900
16.30	0.260	0.016	0.112	0.128								
17.30	0.245	0.015	0.087	0.102								
18.30	0.216	0.014	0.052	0.066								
19.30	0.197	0.014	0.036	0.050								
20.30	0.185	0.013	0.031	0.044								
21.30	0.176	0.013	0.029	0.042								
22.30	0.167	0.013	0.029	0.042								
23.30	0.160	0.012	0.030	0.042								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	16.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.09	1.62			
7.30	15.6	0.22	9.36			
8.97		0.30	36.00			
9.63		0.64	60.92			
10.30	23.3	0.96	92.28			
11.30		0.96	149.88			
12.30		0.87	205.86			
13.30	27.8	0.78	256.44			
14.30		0.65	300.90			
15.30		0.59	338.82			
16.30	27.8	0.22	367.56			
17.30		0.09	378.42			
18.30		0.01	382.38			
19.30	23.9	0.00	382.80			
20.30		0.00	382.80			
21.30		0.00	382.80			
22.30	22.2	0.00	382.80			
23.30		0.00	382.80			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 2 9-21-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.152	0.011	0.034	0.045								
1.30	0.147	0.011	0.035	0.046								
2.30	0.139	0.011	0.037	0.048								
3.30	0.133	0.011	0.041	0.051								
4.30	0.127	0.011	0.044	0.055								
5.30	0.120	0.010	0.047	0.057								
6.30	0.113	0.011	0.051	0.062								
7.30	0.106	0.011	0.057	0.067								
8.65	0.098	0.009	0.070	0.078								
9.30	0.116	0.010	0.073	0.082					0.155	0.044	0.030	
10.30	0.155	0.014	0.074	0.088								
11.30	0.201	0.017	0.075	0.092								440
12.30	0.262	0.018	0.076	0.094								
13.30	0.320	0.019	0.073	0.092								
14.30	0.361	0.018	0.072	0.090					0.480**	0.024	0.027	440
15.30	0.387	0.019	0.070	0.089								
16.30	0.393	0.017	0.066	0.083								
17.30	0.381	0.018	0.061	0.079								
18.30	0.364	0.017	0.057	0.074								
19.30	0.351	0.016	0.055	0.071								
20.30	0.345	0.015	0.053	0.068								
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.9	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	18.9	0.00	0.00			
5.30		0.00	0.00			
6.30		0.02	0.36			
7.30	18.9	0.05	2.10			
8.65		0.22	12.56			
9.30		0.32	23.16			
10.30	21.7	0.50	45.60			
11.30		0.72	79.56			
12.30		0.82	124.56			
13.30	25.0	0.71	171.78			
14.30		0.74	218.92			
15.30		0.45	254.10			
16.30	27.2	0.32	278.76			
17.30		0.01	292.38			
18.30		0.00	292.80			
19.30	21.7	0.00	292.80			
20.30		0.00	292.80			
21.30		0.00	292.80			
22.30	17.2	0.00	292.80			
23.30		0.00	292.80			

% POSSIBLE MINUTES OF SUNSHINE 38

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* The [NO] data from approximately 0828 EST, 21 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rahter than to gas-phase chemical reactions.

** Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 2 9-20-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.005	0.001	0.006								
1.47	0.000	0.004	0.001	0.005								
2.47	0.000	0.004	0.001	0.005								
3.47	0.000	0.004	0.045	0.049								
4.47	0.000	0.167	0.046	0.213								0
5.47	0.000	0.165	0.046	0.211								
6.47	0.000	0.163	0.046	0.209								
7.47	0.000	0.151	0.055	0.205								
8.47												
9.80	0.010	0.071	0.126	0.197								
10.47	0.024	0.053	0.140	0.194					0.043	0.135	0.017	1300
11.47	0.049	0.031	0.150	0.181								
12.47	0.079	0.022	0.145	0.168								
13.47	0.120	0.017	0.139	0.156								
14.47	0.155	0.015	0.127	0.142					0.129	0.107	0.000	
15.47	0.181	0.014	0.119	0.133								1100
16.47	0.180	0.013	0.107	0.120								
17.47	0.171	0.013	0.092	0.105								
18.47	0.157	0.012	0.060	0.072								
19.47	0.130	0.012	0.040	0.051								
20.47	0.121	0.012	0.029	0.041								
21.47	0.116	0.012	0.025	0.036								
22.47	0.109	0.012	0.022	0.034								
23.47	0.106	0.012	0.022	0.034								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	16.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.09	2.52			
7.47	15.6	0.22	11.56			
8.47		0.30	27.00			
9.80		0.64	67.32			
10.47	23.3	0.96	101.88			
11.47		0.96	159.48			
12.47		0.87	214.56			
13.47	27.8	0.78	264.24			
14.47		0.65	307.40			
15.47		0.59	344.72			
16.47	27.8	0.22	369.76			
17.47		0.09	379.52			
18.47		0.01	382.48			
19.47	23.9	0.00	382.80			
20.47		0.00	382.80			
21.47		0.00	382.80			
22.47	22.2	0.00	382.80			
23.47		0.00	382.80			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 2 9-21-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO* (PPM)	NO2 (PPM)	NOx (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.099	0.011	0.020	0.031								
1.47	0.095	0.011	0.020	0.031								
2.47	0.089	0.011	0.020	0.031								
3.47	0.084	0.011	0.020	0.031								
4.47	0.079	0.011	0.020	0.031								
5.47	0.075	0.010	0.021	0.031								
6.47	0.070	0.010	0.024	0.035								
7.47	0.064	0.011	0.028	0.039								
8.80	0.062	0.009	0.034	0.043								
9.47	0.072	0.011	0.036	0.047					0.089	0.021	0.010	
10.47	0.097	0.013	0.036	0.049								
11.47	0.127	0.013	0.037	0.050								210
12.47	0.170	0.014	0.039	0.052								
13.47	0.204	0.014	0.037	0.051								
14.47	0.231	0.015	0.039	0.053					0.285	0.020	0.038	200
15.47	0.242	0.015	0.036	0.051								
16.47	0.244	0.014	0.035	0.049								
17.47	0.234	0.016	0.033	0.049								
18.47	0.224	0.016	0.029	0.045								
19.47	0.216	0.015	0.027	0.042								
20.47	0.211	0.015	0.027	0.042								
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	LUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.9	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	18.9	0.00	0.00			
5.47		0.00	0.00			
6.47		0.02	0.36			
7.47	18.9	0.05	2.60			
8.80		0.22	14.76			
9.47		0.32	26.36			
10.47	21.7	0.56	50.60			
11.47		0.72	86.76			
12.47		0.82	132.76			
13.47	25.0	0.71	178.86			
14.47		0.74	222.52			
15.47		0.45	258.60			
16.47	27.2	0.32	281.96			
17.47		0.01	292.48			
18.47		0.00	292.80			
19.47	21.7	0.00	292.80			
20.47		0.00	292.80			
21.13		0.00	292.80			
22.13	17.2	0.00	292.80			
23.13		0.00	292.80			

% POSSIBLE MINUTES OF SUNSHINE 38

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* The [NO] data from approximately 0828 EST, 21 September 76 until t end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion of the sampli cycle. It is believed that these effects are related to a humid sampling line problem rather than to gas-phase chemical reactio

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 2 9-20-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (LST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.007	0.002	0.010								
1.63	0.000	0.007	0.001	0.009								
2.63	0.000	0.006	0.001	0.007								
3.63	0.000	0.170	0.039	0.209								
4.63	0.000	0.168	0.040	0.207								0
5.63	0.000	0.166	0.039	0.204								
6.63	0.000	0.164	0.040	0.203								
7.63	0.000	0.152	0.051	0.203								
8.63	0.001	0.116	0.080	0.196								
9.97	0.013	0.071	0.127	0.198								
10.63	0.028	0.047	0.145	0.193					0.029	0.153	0.037	1300
11.63	0.061	0.027	0.156	0.183								
12.63	0.098	0.020	0.155	0.175								
13.63	0.147	0.017	0.147	0.164								
14.63	0.186	0.015	0.139	0.154					0.161	0.152	0.000	
15.63	0.213	0.014	0.128	0.142								1900
16.63	0.205	0.014	0.110	0.124								
17.63	0.193	0.013	0.088	0.101								
18.63	0.164	0.013	0.052	0.065								
19.63	0.150	0.013	0.035	0.048								
20.63	0.139	0.013	0.029	0.042								
21.63	0.130	0.013	0.027	0.040								
22.63	0.125	0.013	0.025	0.037								
23.63	0.119	0.012	0.025	0.036								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.09	3.42			
7.63	15.6	0.22	15.76			
8.63		0.30	30.00			
9.97		0.64	73.72			
10.63	23.3	0.96	111.48			
11.63		0.96	169.08			
12.63		0.87	225.26			
13.63	27.8	0.78	272.04			
14.63		0.65	313.90			
15.63		0.59	350.62			
16.63	27.8	0.22	371.96			
17.63		0.09	380.22			
18.63		0.01	382.56			
19.63	23.9	0.00	382.80			
20.63		0.00	382.80			
21.63		0.00	382.80			
22.63	22.2	0.00	382.80			
23.63		0.00	382.80			

% POSSIBLE MINUTES OF SUNSHINE 50

RDU AIRPORT MAXIMUM TEMPERATURE 29.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 2 9-21-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO * (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.112	0.011	0.025	0.035								
1.63	0.108	0.011	0.024	0.034								
2.63	0.105	0.012	0.024	0.035								
3.63	0.098	0.012	0.025	0.036								
4.63	0.094	0.011	0.026	0.036								
5.63	0.089	0.010	0.027	0.036								
6.63	0.084	0.011	0.028	0.039								
7.63	0.078	0.011	0.032	0.043								
8.97	0.078	0.010	0.039	0.048								
9.63	0.091	0.013	0.041	0.053					0.097	0.026	0.050	
10.63	0.116	0.013	0.044	0.056								
11.63	0.154	0.015	0.044	0.059								590
12.63	0.207	0.015	0.045	0.060								
13.63	0.243	0.015	0.046	0.061								
14.63	0.271	0.017	0.046	0.063					0.329 **	0.022	0.014	500
15.63	0.280	0.017	0.045	0.062								
16.63	0.279	0.017	0.043	0.060								
17.63	0.268	0.018	0.039	0.057								
18.63	0.257	0.019	0.034	0.053								
19.63	0.247	0.016	0.032	0.048								
20.63	0.241	0.015	0.031	0.046								
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.9	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	18.9	0.00	0.00			
5.63		0.00	0.00			
6.63		0.02	0.76			
7.63	18.9	0.05	3.10			
8.97		0.22	16.96			
9.63		0.32	29.56			
10.63	21.7	0.50	55.60			
11.63		0.72	93.96			
12.63		0.82	140.96			
13.63	25.0	0.71	185.98			
14.63		0.74	229.72			
15.63		0.45	265.10			
16.63	27.2	0.32	285.16			
17.63		0.01	292.58			
18.63		0.00	292.80			
19.63	21.7	0.00	292.80			
20.63		0.00	292.80			
21.13		0.00	292.80			
22.13	17.2	0.00	292.80			
23.13		0.00	292.80			

% POSSIBLE MINUTES OF SUNSHINE 38

RDU AIRPORT MAXIMUM TEMPERATURE 27.2 CENT

* The [NO] data from approximately 0828 EST, 21 September 76 until the end of the run are suspect, but have been retained. The elevated [NO] levels are not due to thermal zero drift in the instrument. Moreover, there appears to be a smearing of the [NO] readings across the four chambers and the ambient air portion o the sampling cycle. It is believed that these effects are related to a humidity/sampling line problem rather than to gas phase chemical reactions.

** Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 5 9-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOX1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.000	0.000	0.000								
1.13	0.000	0.001	0.000	0.001								
2.13	0.000	0.001	0.000	0.001								
3.13	0.000	0.001	0.000	0.001								
4.13	0.000	0.001	0.000	0.001								0
5.13	0.000	0.903	0.216	1.119								
6.13	0.000	0.884	0.229	1.113								
7.13	0.000	0.723	0.385	1.108								
8.13	0.091	0.034	0.921	0.955								
9.13	0.256	0.012	0.785	0.797					0.703	0.463	0.336	
10.13	0.459	0.010	0.631	0.641								
11.13	0.751	0.010	0.461	0.471								
12.13	0.932	0.010	0.365	0.374								
13.13	0.972	0.010	0.327	0.337								
14.13	0.975	0.010	0.297	0.307					1.326	0.061	0.236	
15.13	0.960	0.010	0.265	0.275								
16.13	0.906	0.009	0.241	0.249								
17.13	0.857	0.007	0.221	0.229								
18.13	0.805	0.007	0.202	0.210								
19.13	0.767	0.006	0.188	0.195								
20.13	0.739	0.005	0.180	0.185								
21.13	0.715	0.005	0.173	0.179								
22.13	0.692	0.004	0.168	0.172								
23.13	0.673	0.004	0.163	0.167								

TIME (EST)	TEMP (DEGF)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	11.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	8.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.07	0.56			
7.13	10.0	0.31	6.68			
8.13		0.61	27.68			
9.13		0.85	66.20			
10.13	22.8	1.04	118.72			
11.13		1.07	181.56			
12.13		1.16	246.28			
13.13	26.1	1.08	315.24			
14.13		0.92	378.76			
15.13		0.55	431.00			
16.13	25.6	0.35	462.40			
17.13		0.07	481.16			
18.13		0.00	484.80			
19.13	19.4	0.00	484.80			
20.13		0.00	484.80			
21.13		0.00	484.80			
22.13	17.2	0.00	484.80			
23.13		0.00	484.80			

% POSSIBLE MINUTES OF SUNSHINE 73

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 3 9-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NMKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.655	0.004	0.159	0.164								
1.13	0.638	0.004	0.157	0.161								
2.13	0.621	0.004	0.153	0.157								
3.13	0.605	0.003	0.150	0.153								
4.13	0.591	0.003	0.147	0.150								660
5.13	0.579	0.003	0.143	0.147								
6.13	0.567	0.003	0.142	0.145								
7.13	0.552	0.003	0.141	0.144								
8.13	0.535	0.004	0.147	0.151								
9.13	0.529	0.007	0.150	0.157					0.710	0.033	0.250	
10.13	0.552	0.011	0.145	0.156								
11.13	0.598	0.012	0.137	0.149								
12.13	0.641	0.011	0.125	0.136								
13.13	0.681	0.010	0.118	0.127								
14.13	0.705	0.010	0.108	0.118					0.853	0.032	0.151	
15.13	0.695	0.010	0.105	0.114								150
16.13	0.674	0.009	0.092	0.101								
17.13	0.633	0.006	0.085	0.090								
18.13	0.620	0.006	0.076	0.082								
19.13	0.597	0.006	0.073	0.079								
20.13	0.579	0.006	0.068	0.075								
21.13	0.556	0.005	0.064	0.070								
22.13	0.535	0.004	0.060	0.064								
23.13	0.521	0.004	0.057	0.061								

% POSSIBLE MINUTES OF SUNSHINE 58

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	15.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	12.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.09	0.72			
7.13	14.4	0.31	7.88			
8.13		0.61	28.88			
9.13		0.91	67.88			
10.13	23.9	0.92	122.56			
11.13		1.03	178.64			
12.13		1.14	241.32			
13.13	27.2	1.11	309.48			
14.13		0.85	373.84			
15.13		0.65	422.20			
16.13	27.2	0.44	459.52			
17.13		0.15	485.60			
18.13		0.00	491.40			
19.13	21.1	0.00	491.40			
20.13		0.00	491.40			
21.13		0.00	491.40			
22.13	18.9	0.00	491.40			
23.13		0.00	491.40			

CHAMBER NUMBER 1
DAY 3 OF 5 9-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.504	0.004	0.056	0.060								
1.13	0.492	0.004	0.055	0.059								
2.13	0.480	0.004	0.052	0.057								
3.13	0.468	0.004	0.051	0.056								
4.13	0.456	0.004	0.050	0.055								
5.13	0.443	0.004	0.049	0.053								0
6.13	0.433	0.004	0.048	0.052								
7.13	0.422	0.005	0.049	0.055								
8.13	0.407	0.009	0.055	0.063								
9.13	0.391	0.012	0.062	0.074					0.356	0.018	0.053	
10.13	0.390	0.012	0.063	0.075								
11.13	0.407	0.012	0.063	0.075								
12.13	0.430	0.012	0.062	0.074								
13.13	0.446	0.012	0.061	0.073								
14.13	0.447	0.012	0.059	0.071								
15.13	0.448	0.011	0.057	0.067								
16.13	0.457	0.011	0.053	0.064					0.488	0.018	0.072	
17.13	0.420	0.011	0.050	0.061								150
18.13	0.404	0.010	0.046	0.056								
19.13	0.386	0.009	0.042	0.050								
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	17.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.7	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	15.0	0.18	5.24			
8.13		0.41	15.88			
9.13		0.78	43.44			
10.13	22.8	0.96	91.68			
11.13		1.08	150.24			
12.13		0.96	214.08			
13.13	27.2	0.71	269.68			
14.13		0.76	312.68			
15.13		0.59	356.92			
16.13	27.2	0.27	389.76			
17.13		0.09	404.52			
18.13		0.00	409.20			
19.13	21.1	0.00	409.20			
20.13		0.00	409.20			
21.13		0.00	409.20			
22.13	18.3	0.00	409.20			
23.13		0.00	409.20			

% POSSIBLE MINUTES OF SUNSHINE 34

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 5 9-23-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	OS (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.002	0.002	0.004								
1.30	0.000	0.003	0.001	0.004								
2.30	0.000	0.005	0.001	0.006								
3.30	0.000	0.005	0.000	0.005								
4.30	0.000	0.005	0.083	0.089								440
5.30	0.000	0.629	0.139	0.768								
6.30	0.000	0.612	0.151	0.763								
7.30	0.000	0.440	0.298	0.738								
8.30	0.136	0.021	0.617	0.638					0.573	0.316	0.217	
9.30	0.259	0.011	0.535	0.545								
10.30	0.456	0.006	0.448	0.455								
11.30	0.706	0.006	0.353	0.359								
12.30	0.878	0.006	0.304	0.310								
13.30	0.937	0.007	0.280	0.288					1.236	0.038	0.172	
14.30	0.952	0.007	0.257	0.264								
15.30	0.951	0.007	0.238	0.246								
16.30	0.911	0.006	0.221	0.228								
17.30	0.877	0.006	0.204	0.211								
18.30	0.835	0.006	0.191	0.198								
19.30	0.804	0.006	0.180	0.186								
20.30	0.781	0.005	0.172	0.178								
21.30	0.759	0.005	0.167	0.172								
22.30	0.739	0.004	0.161	0.166								
23.30	0.725	0.004	0.156	0.160								

% POSSIBLE MINUTES OF SUNSHINE 73

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	11.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	8.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.07	1.26			
7.30	10.0	0.31	9.78			
8.30		0.61	33.78			
9.30		0.85	74.70			
10.30	22.8	1.04	129.12			
11.30		1.07	192.06			
12.30		1.16	257.88			
13.30	26.1	1.08	326.04			
14.30		0.92	387.96			
15.30		0.55	456.30			
16.30	25.6	0.35	465.90			
17.30		0.07	481.86			
18.30		0.00	484.80			
19.30	19.4	0.00	484.80			
20.30		0.00	484.80			
21.30		0.00	484.80			
22.30	17.2	0.00	484.80			
23.30		0.00	484.80			

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 5 9-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.708	0.003	0.154	0.157								
1.30	0.695	0.003	0.152	0.155								
2.30	0.679	0.003	0.148	0.151								
3.30	0.666	0.003	0.145	0.149								
4.30	0.656	0.003	0.144	0.148								820
5.30	0.644	0.003	0.141	0.144								
6.30	0.633	0.003	0.139	0.142								
7.30	0.621	0.003	0.140	0.143								
8.30	0.609	0.004	0.145	0.150					0.756	0.018	0.217	
9.30	0.598	0.006	0.145	0.152								
10.30	0.619	0.007	0.142	0.150								
11.30	0.658	0.007	0.136	0.143								
12.30	0.696	0.007	0.125	0.133								
13.30	0.729	0.006	0.120	0.126					0.930	0.025	0.125	
14.30	0.753	0.006	0.122	0.128								
15.30	0.750	0.006	0.105	0.111								400
16.30	0.736	0.006	0.097	0.104								
17.30	0.709	0.004	0.090	0.094								
18.30	0.689	0.004	0.082	0.087								
19.30	0.673	0.004	0.078	0.082								
20.30	0.655	0.004	0.073	0.077								
21.30	0.642	0.004	0.071	0.075								
22.30	0.625	0.004	0.066	0.071								
23.30	0.610	0.004	0.063	0.067								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPH)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	15.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	12.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.09	1.62			
7.30	14.4	0.51	10.98			
8.30		0.61	34.98			
9.30		0.91	76.98			
10.30	23.9	0.92	131.76			
11.30		1.03	188.94			
12.30		1.14	252.72			
13.30	27.2	1.11	320.58			
14.30		0.83	382.14			
15.30		0.65	428.70			
16.30	27.2	0.44	463.92			
17.30		0.15	485.10			
18.30		0.00	491.40			
19.30	21.1	0.00	491.40			
20.30		0.00	491.40			
21.30		0.00	491.40			
22.30	18.9	0.00	491.40			
23.30		0.00	491.40			

% POSSIBLE MINUTES OF SUNSHINE 58

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 3 OF 5 9-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.598	0.003	0.062	0.065								
1.30	0.586	0.003	0.060	0.063								
2.30	0.572	0.004	0.061	0.065								
3.30	0.564	0.003	0.058	0.061								
4.30	0.553	0.003	0.056	0.059								
5.30	0.544	0.003	0.055	0.058								520
6.30	0.535	0.003	0.055	0.058								
7.30	0.525	0.005	0.056	0.061								
8.30	0.509	0.009	0.061	0.070								
9.30	0.493	0.010	0.064	0.074					0.439	0.011	0.075	
10.30	0.482	0.010	0.065	0.075								
11.30	0.497	0.010	0.064	0.074								
12.30	0.514	0.010	0.064	0.074								
13.30	0.524	0.010	0.063	0.073								
14.30	0.524	0.010	0.062	0.072								
15.30	0.526	0.010	0.059	0.068								
16.30	0.518	0.009	0.056	0.064					0.524	0.015	0.084	
17.30	0.503	0.009	0.052	0.061								120
18.30	0.484	0.007	0.048	0.056								
19.30	0.472	0.007	0.046	0.053								
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	17.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	16.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.03	0.54			
7.30	15.0	0.18	5.04			
8.30		0.41	19.98			
9.30		0.78	51.24			
10.30	22.8	0.96	101.28			
11.30		1.08	161.04			
12.30		0.96	225.68			
13.30	27.2	0.71	276.78			
14.30		0.76	320.28			
15.30		0.59	362.82			
16.30	27.2	0.27	392.46			
17.30		0.09	405.42			
18.30		0.00	409.20			
19.30	21.1	0.00	409.20			
20.30		0.00	409.20			
21.30		0.00	409.20			
22.30	18.3	0.00	409.20			
23.30		0.00	409.20			

% POSSIBLE MINUTES OF SUNSHINE 34

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 3 9-23-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.000	0.000	0.000								
1.47	0.000	0.001	0.000	0.001								
2.47	0.000	0.001	0.000	0.001								
3.47	0.000	0.001	0.000	0.001								
4.47	0.000	0.001	0.049	0.050								
5.47	0.000	0.218	0.044	0.262								210
6.47	0.000	0.206	0.053	0.260								
7.47	0.093	0.004	0.213	0.217								
8.47	0.268	0.003	0.176	0.180								
9.47	0.357	0.004	0.165	0.169					0.524	0.041 *	0.223	
10.47	0.412	0.004	0.157	0.161								
11.47	0.461	0.005	0.148	0.153								
12.47	0.515	0.006	0.139	0.145								
13.47	0.559	0.006	0.128	0.135								
14.47	0.585	0.006	0.120	0.126					0.638	0.027	0.112	
15.47	0.584	0.006	0.110	0.117								
16.47	0.559	0.006	0.103	0.109								
17.47	0.530	0.006	0.094	0.101								
18.47	0.503	0.006	0.087	0.093								
19.47	0.482	0.005	0.080	0.086								
20.47	0.464	0.005	0.077	0.082								
21.47	0.450	0.004	0.075	0.079								
22.47	0.438	0.004	0.072	0.076								
23.47	0.427	0.003	0.070	0.073								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	11.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	8.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.07	1.96			
7.47	10.0	0.31	12.88			
8.47		0.61	39.88			
9.47		0.85	83.20			
10.47	22.8	1.04	139.52			
11.47		1.07	202.76			
12.47		1.16	269.48			
13.47	26.1	1.08	336.84			
14.47		0.92	397.16			
15.47		0.55	442.00			
16.47	25.6	0.35	469.40			
17.47		0.07	482.56			
18.47		0.00	484.80			
19.47	19.4	0.00	484.80			
20.47		0.00	484.80			
21.47		0.00	484.80			
22.47	17.2	0.00	484.80			
23.47		0.00	484.80			

% POSSIBLE MINUTES OF SUNSHINE 73

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 3 9-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.417	0.003	0.068	0.072								
1.47	0.406	0.003	0.067	0.071								
2.47	0.397	0.003	0.066	0.070								
3.47	0.386	0.003	0.065	0.068								
4.47	0.378	0.003	0.064	0.067								140
5.47	0.372	0.002	0.062	0.064								
6.47	0.364	0.002	0.061	0.063								
7.47	0.354	0.003	0.063	0.066								
8.47	0.344	0.005	0.068	0.074								
9.47	0.343	0.006	0.070	0.076					0.398	0.015	0.233	
10.47	0.369	0.007	0.068	0.076								
11.47	0.407	0.007	0.065	0.073								
12.47	0.440	0.007	0.062	0.070								
13.47	0.471	0.006	0.060	0.066								
14.47	0.483	0.006	0.056	0.062					0.520	0.026	0.092	
15.47	0.482	0.006	0.053	0.060								
16.47	0.471	0.006	0.050	0.057								400
17.47	0.450	0.004	0.047	0.051								
18.47	0.432	0.004	0.041	0.045								
19.47	0.421	0.004	0.039	0.043								
20.47	0.410	0.004	0.036	0.041								
21.47	0.401	0.004	0.035	0.040								
22.47	0.388	0.003	0.034	0.037								
23.47	0.378	0.003	0.032	0.035								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	15.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	12.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.09	2.52			
7.47	14.4	0.31	14.08			
8.47		0.61	41.08			
9.47		0.91	86.08			
10.47	23.9	0.92	140.96			
11.47		1.03	199.24			
12.47		1.14	264.12			
13.47	27.2	1.11	331.68			
14.47		0.83	390.44			
15.47		0.65	435.20			
16.47	27.2	0.44	468.32			
17.47		0.15	486.00			
18.47		0.00	491.40			
19.47	21.1	0.00	491.40			
20.47		0.00	491.40			
21.47		0.00	491.40			
22.47	18.9	0.00	491.40			
23.47		0.00	491.40			

% POSSIBLE MINUTES OF SUNSHINE 58

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 3 OF 3 9-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.24 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.367	0.003	0.032	0.035								
1.47	0.357	0.003	0.031	0.034								
2.47	0.350	0.003	0.030	0.033								
3.47	0.342	0.003	0.029	0.032								
4.47	0.333	0.003	0.028	0.031								
5.47	0.324	0.003	0.028	0.031								160
6.47	0.317	0.003	0.028	0.031								
7.47	0.309	0.005	0.030	0.035								
8.47	0.298	0.007	0.032	0.040								
9.47	0.290	0.009	0.034	0.043					0.211	0.010	0.055	
10.47	0.294	0.009	0.035	0.044								
11.47	0.310	0.009	0.036	0.045								
12.47	0.330	0.009	0.036	0.045								
13.47	0.338	0.009	0.035	0.044								
14.47	0.340	0.009	0.035	0.044								
15.47	0.342	0.009	0.034	0.043								
16.47	0.332	0.007	0.032	0.040					0.296	0.015	0.071	
17.47	0.321	0.006	0.030	0.036								150
18.47	0.309	0.006	0.027	0.033								
19.47	0.298	0.007	0.025	0.032								
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	17.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	16.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	15.0	0.18	6.84			
8.47		0.41	24.08			
9.47		0.78	59.04			
10.47	22.8	0.96	110.88			
11.47		1.08	171.84			
12.47		0.96	233.28			
13.47	27.2	0.71	283.88			
14.47		0.76	327.88			
15.47		0.59	368.72			
16.47	27.2	0.27	395.16			
17.47		0.09	406.52			
18.47		0.00	409.20			
19.47	21.1	0.00	409.20			
20.47		0.00	409.20			
21.47		0.00	409.20			
22.47	18.3	0.00	409.20			
23.47		0.00	409.20			

% POSSIBLE MINUTES OF SUNSHINE 34

PDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 5 9-23-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.001	0.000	0.001								
1.63	0.000	0.001	0.000	0.001								
2.63	0.000	0.002	0.000	0.002								
3.63	0.000	0.002	0.000	0.002								
4.63	0.000	0.001	0.000	0.001								
5.63	0.000	0.002	0.000	0.002								220
6.63	0.000	0.090	0.020	0.110								
7.63	0.002	0.057	0.051	0.108								
8.63	0.046	0.016	0.084	0.101								
9.63	0.088	0.015	0.083	0.098					0.114	0.081	0.053	
10.63	0.147	0.018	0.075	0.093								
11.63	0.224	0.018	0.062	0.080								
12.63	0.301	0.018	0.055	0.073								
13.63	0.347	0.018	0.047	0.065								
14.63	0.369	0.017	0.044	0.061					0.381	0.021	0.034	
15.63	0.370	0.017	0.040	0.057								
16.63	0.358	0.016	0.037	0.053								
17.63	0.341	0.011	0.033	0.044								
18.63	0.321	0.007	0.028	0.035								
19.63	0.309	0.006	0.026	0.032								
20.63	0.301	0.005	0.025	0.030								
21.63	0.295	0.004	0.024	0.028								
22.63	0.289	0.004	0.024	0.028								
23.63	0.282	0.003	0.022	0.026								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	11.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	8.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.07	2.66			
7.63	10.0	0.31	15.98			
8.63		0.61	45.98			
9.63		0.85	91.70			
10.63	22.8	1.04	149.92			
11.63		1.07	213.46			
12.63		1.16	281.08			
13.63	26.1	1.08	347.64			
14.63		0.92	406.36			
15.63		0.55	447.50			
16.63	25.6	0.55	472.90			
17.63		0.07	483.26			
18.63		0.00	484.80			
19.63	19.4	0.00	484.80			
20.63		0.00	484.80			
21.63		0.00	484.80			
22.63	17.2	0.00	484.80			
23.63		0.00	484.80			

% POSSIBLE MINUTES OF SUNSHINE 73

RDU AIRPORT MAXIMUM TEMPERATURE 26.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 5 9-24-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.278	0.005	0.022	0.026								
1.63	0.271	0.002	0.022	0.025								
2.63	0.267	0.002	0.021	0.024								
3.63	0.264	0.002	0.021	0.024								
4.63	0.258	0.002	0.021	0.024								
5.63	0.255	0.002	0.020	0.022								
6.63	0.249	0.002	0.020	0.022								170
7.63	0.245	0.004	0.022	0.027								
8.63	0.237	0.007	0.025	0.032								
9.63	0.234	0.014	0.026	0.040								
10.63	0.242	0.018	0.027	0.045					0.259	0.013	0.093	
11.63	0.261	0.018	0.027	0.045								
12.63	0.279	0.017	0.027	0.044								
13.63	0.295	0.016	0.026	0.042								
14.63	0.301	0.016	0.026	0.042								
15.63	0.298	0.016	0.025	0.041					0.310	0.016	0.024	
16.63	0.290	0.016	0.024	0.040								
17.63	0.277	0.014	0.022	0.036								300
18.63	0.262	0.009	0.019	0.028								
19.63	0.255	0.009	0.016	0.025								
20.63	0.244	0.006	0.016	0.022								
21.63	0.235	0.006	0.015	0.021								
22.63	0.228	0.004	0.014	0.018								
23.63	0.222	0.003	0.013	0.016								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	15.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	12.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.09	3.42			
7.63	14.4	0.31	17.18			
8.63		0.61	47.18			
9.63		0.91	95.18			
10.63	25.9	0.92	150.16			
11.63		1.03	209.54			
12.63		1.14	275.52			
13.63	27.2	1.11	342.78			
14.63		0.83	398.74			
15.63		0.65	441.70			
16.63	27.2	0.44	472.72			
17.63		0.15	488.10			
18.63		0.00	491.40			
19.63	21.1	0.00	491.40			
20.63		0.00	491.40			
21.63		0.00	491.40			
22.63	18.9	0.00	491.40			
23.63		0.00	491.40			

% POSSIBLE MINUTES OF SUNSHINE 58

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 3 OF 5 9-25-76

URBAN MIX 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.215	0.003	0.013	0.016								
1.63	0.212	0.003	0.013	0.016								
2.63	0.207	0.003	0.013	0.016								
3.63	0.202	0.003	0.013	0.016								
4.63	0.198	0.003	0.012	0.015								
5.63	0.194	0.002	0.012	0.014								150
6.63	0.188	0.003	0.012	0.015								
7.63	0.184	0.006	0.013	0.019								
8.63	0.176	0.011	0.015	0.026								
9.63	0.172	0.013	0.018	0.031					0.089 *	0.013	0.020	
10.63	0.179	0.016	0.020	0.036								
11.63	0.196	0.016	0.021	0.037								
12.63	0.214	0.016	0.021	0.037								
13.63	0.222	0.017	0.021	0.039								
14.63	0.228	0.017	0.021	0.039								
15.63	0.230	0.016	0.021	0.037								
16.63	0.225	0.015	0.020	0.035					0.174	0.017	0.034	
17.63	0.214	0.014	0.018	0.032								400
18.63	0.203	0.010	0.015	0.025								
19.63	0.195	0.007	0.014	0.021								
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	17.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	15.0	0.18	8.64			
8.63		0.41	28.18			
9.63		0.78	66.84			
10.63	22.8	0.96	120.48			
11.63		1.08	182.64			
12.63		0.96	242.88			
13.63	27.2	0.71	290.98			
14.63		0.76	335.48			
15.63		0.59	374.62			
16.63	27.2	0.27	397.86			
17.63		0.09	407.22			
18.63		0.00	409.20			
19.63	21.1	0.00	409.20			
20.63		0.00	409.20			
21.63		0.00	409.20			
22.63	18.3	0.00	409.20			
23.63		0.00	409.20			

% POSSIBLE MINUTES OF SUNSHINE 34

RDU AIRPORT MAXIMUM TEMPERATURE 28.3 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO. 68-02-2209

CHAMBER NUMBER 1
DAY 1 OF 2 10- 6-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.004	0.001	0.005								
1.13	0.000	0.003	0.001	0.004								
2.13	0.000	0.003	0.001	0.004								
3.13	0.000	0.003	0.000	0.003								
4.13	0.000	0.081	0.017	0.099								
5.13	0.000	0.120	0.020	0.140								0
6.13	0.000	0.119	0.019	0.138								
7.13	0.000	0.114	0.025	0.139								
8.13	0.000	0.086	0.053	0.139								
9.13	0.123	0.021	0.114	0.135								
10.13	0.297	0.014	0.098	0.112					*	0.065	0.168	
11.13	0.380	0.015	0.085	0.100								
12.13	0.394	0.015	0.081	0.096								300
13.13	0.381	0.015	0.081	0.096								
14.13	0.388	0.015	0.080	0.095					0.515	0.028	0.209	
15.13	0.373	0.014	0.078	0.092								
16.13	0.366	0.013	0.075	0.088								
17.13	0.352	0.014	0.072	0.086								
18.13	0.330	0.012	0.064	0.075								
19.13	0.316	0.009	0.059	0.068								
20.13	0.307	0.009	0.057	0.066								
21.13	0.294	0.009	0.056	0.065								
22.13	0.287	0.011	0.055	0.066								
23.13	0.277	0.014	0.055	0.069								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	11.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	11.1	0.00	0.00			
5.13		0.00	0.00			
6.13		0.05	0.40			
7.13	10.6	0.23	4.84			
8.13		0.51	20.88			
9.13		0.77	53.56			
10.13	20.6	0.79	99.92			
11.13		1.10	149.80			
12.13		0.76	215.08			
13.13	23.3	0.75	258.60			
14.13		0.68	303.04			
15.13		0.28	340.64			
16.13	23.9	0.29	357.52			
17.13		0.07	373.16			
18.13		0.00	376.80			
19.13	19.4	0.00	376.80			
20.13		0.00	376.80			
21.13		0.00	376.80			
22.13	18.3	0.00	376.80			
23.13		0.00	376.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

* Data suspect and discarded.

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CHAMBER NUMBER 1
DAY 2 OF 2 10- 7-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.266	0.015	0.051	0.066								
1.13	0.255	0.017	0.050	0.067								
2.13	0.244	0.014	0.047	0.061								
3.13	0.234	0.015	0.045	0.060								
4.13	0.226	0.014	0.045	0.059								
5.13	0.218	0.014	0.045	0.059								
6.13	0.210	0.013	0.045	0.058								
7.13	0.200	0.012	0.044	0.056								
8.13	0.191	0.014	0.049	0.063								
9.47	0.185	0.011	0.050	0.061								
10.13	0.182	0.016	0.052	0.068								
11.13	0.189	0.019	0.052	0.071								
12.13	0.210	0.020	0.052	0.073								
13.13	0.228	0.021	0.051	0.073								
14.13	0.264	0.021	0.050	0.072								
15.13	0.289	0.021	0.049	0.071								
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	18.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	16.1	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	16.7	0.13	2.84			
8.13		0.32	12.16			
9.47		0.30	37.20			
10.13	21.7	0.42	50.16			
11.13		0.54	76.32			
12.13		0.66	109.68			
13.13	27.2	0.92	151.36			
14.13		0.74	205.12			
15.13		0.32	246.16			
16.13	25.6	0.17	264.16			
17.13		0.00	273.00			
18.13		0.00	273.00			
19.13	21.7	0.00	273.00			
20.13		0.00	273.00			
21.13		0.00	273.00			
22.13	21.1	0.00	273.00			
23.13		0.00	273.00			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR S-NOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 2 10- 6-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 0.7 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.005	0.004	0.009								
1.30	0.000	0.006	0.003	0.009								
2.30	0.000	0.006	0.002	0.008								
3.30	0.000	0.006	0.002	0.008								
4.30	0.000	0.383	0.100	0.483								
5.30	0.000	0.417	0.103	0.521								640
6.30	0.000	0.413	0.103	0.516								
7.30	0.000	0.404	0.113	0.517								
8.30	0.000	0.380	0.127	0.507								
9.30	0.000	0.324	0.174	0.498								
10.30	0.004	0.267	0.235	0.502					0.021	0.219	0.042	
11.30	0.011	0.181	0.284	0.465								
12.30	0.028	0.110	0.327	0.437								220
13.30	0.046	0.068	0.347	0.416								
14.30	0.065	0.043	0.349	0.392					0.137 *	0.305	0.113	
15.30	0.078	0.032	0.332	0.364								
16.30	0.082	0.029	0.313	0.342								
17.30	0.066	0.021	0.302	0.324								
18.30	0.037	0.012	0.262	0.274								
19.30	0.020	0.010	0.232	0.241								
20.30	0.012	0.010	0.213	0.223								
21.30	0.007	0.010	0.206	0.216								
22.30	0.004	0.012	0.202	0.214								
23.30	0.002	0.015	0.198	0.213								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	11.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	11.1	0.00	0.00			
5.30		0.00	0.00			
6.30		0.05	0.90			
7.30	10.6	0.23	7.14			
8.30		0.51	25.98			
9.30		0.77	61.26			
10.30	20.6	0.79	107.82			
11.30		1.10	160.80			
12.30		0.76	220.68			
13.30	24.3	0.75	286.10			
14.30		0.68	349.84			
15.30		0.28	393.44			
16.30	23.9	0.29	360.42			
17.30		0.07	373.86			
18.30		0.00	376.80			
19.30	19.4	0.00	376.80			
20.30		0.00	376.80			
21.30		0.00	376.80			
22.30	18.5	0.00	376.80			
23.30		0.00	376.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 2 10- 7-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 0.7 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.001	0.018	0.192	0.210								
1.30	0.000	0.017	0.187	0.205								
2.30	0.000	0.015	0.185	0.200								
3.30	0.000	0.014	0.183	0.197								
4.30	0.000	0.013	0.183	0.196								
5.30	0.000	0.014	0.183	0.197								
6.30	0.002	0.015	0.180	0.195								
7.30	0.016	0.028	0.166	0.194								
8.30	0.028	0.030	0.163	0.193								
9.63	0.062	0.019	0.156	0.175								
10.30	0.082	0.022	0.153	0.175								
11.30	0.134	0.024	0.142	0.166								
12.30	0.197	0.024	0.130	0.154								
13.30	0.240	0.024	0.117	0.140								
14.30	0.316	0.022	0.101	0.124								
15.30	0.349	0.024	0.087	0.111								
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	18.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	16.1	0.00	0.00			
5.		0.00	0.00			
6.		0.05	0.54			
7.	16.7	0.13	4.14			
8.30		0.32	15.36			
9.63		0.30	40.20			
10.30	21.7	0.42	54.36			
11.30		0.54	81.12			
12.30		0.66	116.28			
13.30	27.2	0.92	160.56			
14.30		0.74	212.52			
15.30		0.52	249.36			
16.30	25.6	0.17	265.80			
17.3		0.00	273.00			
18.3		0.00	273.00			
19.30	21.7	0.00	273.00			
20.30		0.00	273.00			
21.30		0.00	273.00			
22.30	21.1	0.00	273.00			
23.30		0.00	273.00			

CHAMBER NUMBER 3
DAY 1 OF 2 10- 6-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.003	0.001	0.004								
1.47	0.000	0.003	0.001	0.004								
2.47	0.000	0.004	0.001	0.005								
3.47	0.000	0.003	0.001	0.004								
4.47	0.000	0.427	0.102	0.529								
5.47	0.000	0.422	0.104	0.527								330
6.47	0.000	0.417	0.104	0.522								
7.47	0.000	0.406	0.115	0.521								
8.47	0.000	0.356	0.153	0.509								
9.47	0.004	0.255	0.248	0.502								
10.47	0.017	0.106	0.366	0.472					0.052	0.375	0.082	
11.47	0.123	0.033	0.386	0.419								
12.47	0.284	0.019	0.336	0.355								2400
13.47	0.404	0.018	0.274	0.292								
14.47	0.464	0.018	0.223	0.242					0.599	0.145	0.221	
15.47	0.474	0.016	0.184	0.200								
16.47	0.463	0.015	0.156	0.171								
17.47	0.433	0.015	0.133	0.148								
18.47	0.404	0.012	0.113	0.124								
19.47	0.389	0.009	0.107	0.115								
20.47	0.381	0.009	0.102	0.111								
21.47	0.370	0.009	0.101	0.110								
22.47	0.360	0.011	0.099	0.110								
23.47	0.351	0.015	0.099	0.114								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	11.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	11.1	0.00	0.00			
5.47		0.00	0.00			
6.47		0.05	1.40			
7.47	10.6	0.23	9.44			
8.47		0.51	31.08			
9.47		0.77	68.96			
10.47	20.6	0.79	115.72			
11.47		1.10	171.80			
12.47		0.76	228.28			
13.47	23.3	0.75	273.60			
14.47		0.68	316.64			
15.47		0.28	346.24			
16.47	25.9	0.29	365.32			
17.47		0.07	374.50			
18.47		0.00	376.80			
19.47	19.4	0.00	376.80			
20.47		0.00	376.80			
21.47		0.00	376.80			
22.47	18.3	0.00	376.80			
23.47		0.00	376.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 2 10- 7-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CMS)
0.47	0.340	0.017	0.095	0.112								
1.47	0.329	0.017	0.090	0.107								
2.47	0.318	0.015	0.088	0.103								
3.47	0.308	0.014	0.087	0.101								
4.47	0.299	0.013	0.085	0.098								
5.47	0.292	0.013	0.083	0.096								
6.47	0.287	0.011	0.082	0.093								
7.47	0.278	0.011	0.084	0.095								
8.47	0.270	0.014	0.086	0.100								
9.80	0.262	0.013	0.084	0.097								
10.47	0.263	0.016	0.084	0.100								
11.47	0.277	0.019	0.082	0.101								
12.47	0.302	0.022	0.081	0.103								
13.47	0.321	0.021	0.082	0.103								
14.47	0.376	0.021	0.077	0.098								
15.47	0.390	0.021	0.072	0.093								
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	18.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	16.1	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	16.7	0.13	5.44			
8.47		0.32	18.56			
9.80		0.50	43.20			
10.47	21.7	0.42	58.56			
11.47		0.54	87.12			
12.47		0.66	122.88			
13.47	21.2	0.92	169.76			
14.47		0.74	219.92			
15.47		0.52	252.56			
16.47	25.6	0.17	267.56			
17.47		0.00	273.00			
18.47		0.00	273.00			
19.47	21.7	0.00	273.00			
20.47		0.00	273.00			
21.47		0.00	273.00			
22.47	21.1	0.00	273.00			
23.47		0.00	273.00			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 2 10- 6-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.004	0.002	0.006								
1.63	0.000	0.004	0.001	0.005								
2.63	0.000	0.004	0.001	0.005								
3.63	0.000	0.004	0.001	0.005								
4.63	0.000	0.081	0.017	0.099								
5.63	0.000	0.081	0.018	0.100								210
6.63	0.000	0.080	0.017	0.098								
7.63	0.000	0.082	0.017	0.100								
8.63	0.000	0.082	0.018	0.101								
9.63	0.000	0.084	0.025	0.109								
10.63	0.004	0.079	0.030	0.109					0.000	0.043	0.000	
11.63	0.005	0.073	0.034	0.107								
12.63	0.010	0.064	0.038	0.102								220
13.63	0.009	0.058	0.046	0.104								
14.63	0.007	0.050	0.048	0.098					0.051 *	0.015	0.027	
15.63	0.005	0.044	0.050	0.094								
16.63	0.004	0.041	0.050	0.091								
17.63	0.002	0.035	0.055	0.091								
18.63	0.000	0.028	0.056	0.084								
19.63	0.000	0.026	0.055	0.081								
20.63	0.000	0.026	0.054	0.080								
21.63	0.000	0.026	0.054	0.080								
22.63	0.000	0.029	0.054	0.083								
23.63	0.000	0.033	0.053	0.086								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	11.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	11.1	0.00	0.00			
5.63		0.00	0.00			
6.63		0.05	1.90			
7.63	10.6	0.23	11.74			
8.63		0.51	36.18			
9.63		0.77	76.66			
10.63	20.6	0.79	123.62			
11.63		1.10	182.80			
12.63		0.76	235.88			
13.63	23.3	0.75	281.10			
14.63		0.68	323.94			
15.63		0.28	349.04			
16.63	23.9	0.29	366.22			
17.63		0.07	375.26			
18.63		0.00	376.80			
19.63	19.4	0.00	376.80			
20.63		0.00	376.80			
21.63		0.00	376.80			
22.63	18.5	0.00	376.80			
23.63		0.00	376.80			

% POSSIBLE MINUTES OF SUNSHINE 87

RDU AIRPORT MAXIMUM TEMPERATURE 25.0 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 2 10- 7-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.035	0.052	0.088								
1.63	0.000	0.033	0.051	0.084								
2.63	0.000	0.031	0.050	0.081								
3.63	0.000	0.030	0.051	0.081								
4.63	0.000	0.028	0.050	0.078								
5.63	0.000	0.028	0.050	0.078								
6.63	0.001	0.027	0.049	0.076								
7.63	0.004	0.031	0.048	0.079								
8.63	0.010	0.035	0.045	0.080								
9.97	0.013	0.030	0.043	0.073								
10.63	0.018	0.034	0.041	0.075								
11.63	0.022	0.032	0.042	0.074								
12.63	0.027	0.032	0.042	0.074								
13.63	0.034	0.032	0.040	0.072								
14.63	0.041	0.029	0.039	0.068								
15.63	0.041	0.026	0.037	0.063								
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	18.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	16.1	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	16.7	0.13	6.74			
8.63		0.32	21.76			
9.97		0.30	46.20			
10.63	21.7	0.42	62.76			
11.63		0.54	92.52			
12.63		0.66	129.48			
13.63	27.2	0.92	178.96			
14.63		0.74	227.32			
15.63		0.32	255.76			
16.63	25.6	0.17	269.26			
17.63		0.00	273.00			
18.63		0.00	273.00			
19.63	21.7	0.00	273.00			
20.63		0.00	273.00			
21.63		0.00	273.00			
22.63	21.1	0.00	273.00			
23.63		0.00	273.00			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 27.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 2 10-11-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 0.7 PPMC/1.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13												
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.000	0.000	0.000								
3.13	0.000	0.000	0.354	0.354								
4.13	0.000	1.164	0.409	1.573								
5.13	0.000	1.126	0.429	1.555								230
6.13	0.000	1.097	0.446	1.543								
7.13	0.000	1.062	0.469	1.531								
8.13	0.000	1.031	0.496	1.527								
9.13	0.000	1.007	0.493	1.500								
10.13	0.000	0.979	0.484	1.463					0.090	0.538	0.045	
11.13	0.000	0.941	0.477	1.418								0
12.13	0.000	0.908	0.476	1.384								
13.13	0.000	0.863	0.476	1.339								
14.13	0.000	0.816	0.485	1.301					0.068	0.548	0.063	
15.13	0.000	0.799	0.476	1.275								
16.13	0.000	0.772	0.472	1.244								
17.13	0.000	0.748	0.476	1.224								
18.13	0.000	0.735	0.484	1.219								
19.13	0.000	0.714	0.487	1.202								
20.13	0.000	0.698	0.495	1.193								
21.13	0.000	0.683	0.491	1.174								
22.13	0.000	0.662	0.496	1.158								
23.13	0.000	0.650	0.499	1.149								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	5.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	5.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	5.6	0.22	5.56			
8.13		0.51	19.08			
9.13		0.77	51.76			
10.13	15.6	0.90	99.00			
11.13		1.06	154.28			
12.13		1.10	218.20			
13.13	17.8	1.03	283.64			
14.13		0.62	342.16			
15.13		0.50	378.40			
16.13	17.2	0.22	406.16			
17.13		0.04	417.92			
18.13		0.00	420.00			
19.13	11.7	0.00	420.00			
20.13		0.00	420.00			
21.13		0.00	420.00			
22.13	8.9	0.00	420.00			
23.13		0.00	420.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 66.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 2 10-12-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 0.7 PPMC/1.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.635	0.503	1.135								
1.13	0.000	0.615	0.498	1.113								
2.13	0.000	0.579	0.484	1.063								
3.13	0.000	0.567	0.485	1.052								
4.13	0.000	0.571	0.504	1.075								
5.13	0.000	0.558	0.508	1.067								
6.13	0.000	0.548	0.472	1.019								
7.13	0.000	0.537	0.498	1.035								
8.13	0.000	0.532	0.486	1.018								
9.13	0.000	0.518	0.462	0.980								
10.13	0.000	0.507	0.443	0.950								
11.13	0.000	0.470	0.447	0.916								
12.13	0.000	0.444	0.429	0.873								
13.13	0.000	0.426	0.410	0.836								
14.13	0.000	0.406	0.410	0.817								
15.13												
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	6.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	5.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.03	0.24			
7.13	5.0	0.20	5.40			
8.13		0.51	17.88			
9.13		0.79	50.72			
10.13	13.3	0.97	99.56			
11.13		1.07	158.56			
12.13		1.08	222.84			
13.13	17.8	0.99	286.92			
14.13		0.80	344.80			
15.13		0.55	390.80			
16.13	18.9	0.27	421.56			
17.13		0.07	436.16			
18.13		0.00	437.80			
19.13	11.7	0.00	439.80			
20.13		0.00	439.80			
21.13		0.00	439.80			
22.13	7.8	0.00	439.80			
23.13		0.00	439.80			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 66.0 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 2 10-11-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/1.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.50												
1.50	0.011	0.000	0.000	0.000								
2.50	0.001	0.000	0.000	0.000								
3.50	0.000	0.000	0.354	0.354								
4.50	0.000	1.259	0.410	1.669								740
5.50	0.000	1.229	0.453	1.682								
6.50	0.000	1.201	0.468	1.669								
7.50	0.000	1.157	0.509	1.667								
8.50	0.000	1.068	0.562	1.630								
9.50	0.000	0.942	0.651	1.594								
10.50	0.000	0.766	0.787	1.553					0.103	0.687	0.136	
11.50	0.000	0.558	0.920	1.478								450
12.50	0.002	0.373	1.025	1.398								
13.50	0.010	0.242	1.070	1.312								
14.50	0.017	0.155	1.056	1.211					0.192	0.841	0.334	
15.50	0.020	0.118	1.054	1.172								
16.50	0.018	0.104	1.021	1.125								
17.50	0.007	0.094	0.993	1.087								
18.50	0.000	0.084	0.978	1.063								
19.50	0.000	0.080	0.967	1.047								
20.50	0.000	0.075	0.957	1.032								
21.50	0.000	0.075	0.948	1.023								
22.50	0.000	0.074	0.936	1.010								
23.50	0.000	0.072	0.924	0.995								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.50		0.00	0.00			
1.30	5.6	0.00	0.00			
2.50		0.00	0.00			
3.50		0.00	0.00			
4.50	5.0	0.00	0.00			
5.50		0.00	0.00			
6.50		0.03	0.54			
7.30	5.6	0.22	5.76			
8.50		0.51	24.18			
9.50		0.77	59.46			
10.50	15.6	0.90	108.00			
11.50		1.06	164.88			
12.50		1.10	229.20			
13.50	17.8	1.03	293.94			
14.50		0.62	348.56			
15.50		0.50	383.40			
16.50	17.2	0.22	408.56			
17.50		0.04	418.32			
18.50		0.00	420.00			
19.50	11.7	0.00	420.00			
20.50		0.00	420.00			
21.50		0.00	420.00			
22.50	8.9	0.00	420.00			
23.50		0.00	420.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 2 10-12-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/1.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.071	0.910	0.981								
1.30	0.000	0.067	0.895	0.962								
2.30	0.000	0.065	0.863	0.928								
3.30	0.000	0.064	0.847	0.911								
4.30	0.000	0.065	0.865	0.931								
5.30	0.000	0.065	0.854	0.919								
6.30	0.000	0.065	0.816	0.882								
7.30	0.018	0.092	0.795	0.887								
8.30	0.027	0.113	0.731	0.844								
9.30	0.059	0.104	0.693	0.797								
10.30	0.072	0.063	0.691	0.754								
11.30	0.144	0.000	0.658	0.658								
12.30	0.240	0.000	0.593	0.593								
13.30	0.314	0.000	0.505	0.505								
14.30	0.399	0.000	0.427	0.427								
15.30												
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	6.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	5.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.03	0.54			
7.30	5.0	0.20	5.40			
8.30		0.51	22.98			
9.30		0.79	58.62			
10.30	14.5	0.97	109.26			
11.30		1.07	169.26			
12.30		1.08	233.64			
13.30	17.8	0.99	296.82			
14.30		0.80	352.80			
15.30		0.55	396.50			
16.30	18.9	0.27	424.20			
17.30		0.07	436.80			
18.30		0.00	439.80			
19.30	11.7	0.00	439.80			
20.30		0.00	439.80			
21.30		0.00	439.80			
22.30	7.8	0.00	439.80			
23.30		0.00	439.80			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

CHAMBER NUMBER 5
DAY 1 OF 2 10-11-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47												
1.47	0.000	0.000	0.000	0.000								
2.47	0.000	0.000	0.000	0.000								
3.47	0.000	0.000	0.133	0.133								
4.47	0.000	0.415	0.137	0.552								
5.47	0.000	0.406	0.137	0.543								300
6.47	0.000	0.402	0.139	0.541								
7.47	0.000	0.390	0.142	0.532								
8.47	0.000	0.354	0.175	0.529								
9.47	0.000	0.274	0.241	0.515								
10.47	0.009	0.157	0.338	0.495					0.040	0.313	0.080	
11.47	0.052	0.045	0.408	0.453								600
12.47	0.166	0.000	0.387	0.387								
13.47	0.278	0.000	0.328	0.328								
14.47	0.357	0.000	0.267	0.267					0.418	0.194	0.265	
15.47	0.373	0.000	0.222	0.222								
16.47	0.357	0.000	0.177	0.177								
17.47	0.326	0.000	0.137	0.137								
18.47	0.298	0.000	0.110	0.110								
19.47	0.286	0.000	0.102	0.102								
20.47	0.276	0.000	0.099	0.099								
21.47	0.268	0.000	0.097	0.097								
22.47	0.264	0.000	0.095	0.095								
23.47	0.258	0.000	0.093	0.093								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	5.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	5.6	0.22	7.96			
8.47		0.51	29.28			
9.47		0.77	67.16			
10.47	15.6	0.90	117.00			
11.47		1.06	175.48			
12.47		1.10	240.20			
13.47	17.8	1.03	304.24			
14.47		0.62	354.56			
15.47		0.50	388.40			
16.47	17.2	0.22	410.56			
17.47		0.04	418.72			
18.47		0.00	420.00			
19.47	11.7	0.00	420.00			
20.47		0.00	420.00			
21.47		0.00	420.00			
22.47	8.9	0.00	420.00			
23.47		0.00	420.00			

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 2 OF 2 10-12-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NHKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.253	0.000	0.091	0.091								
1.47	0.250	0.000	0.090	0.090								
2.47	0.247	0.000	0.089	0.089								
3.47	0.243	0.000	0.088	0.088								
4.47	0.238	0.000	0.090	0.090								
5.47	0.236	0.000	0.088	0.088								
6.47	0.233	0.000	0.086	0.086								
7.47	0.228	0.000	0.088	0.088								
8.47	0.226	0.000	0.086	0.086								
9.47	0.228	0.000	0.090	0.090								
10.47	0.240	0.000	0.090	0.090								
11.47	0.259	0.000	0.090	0.090								
12.47	0.287	0.000	0.090	0.090								
13.47	0.301	0.000	0.090	0.090								
14.47	0.324	0.000	0.090	0.090								
15.47												
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	6.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.03	0.84			
7.47	5.0	0.20	7.40			
8.47		0.51	28.08			
9.47		0.79	66.52			
10.47	13.3	0.97	118.96			
11.47		1.07	179.96			
12.47		1.08	244.44			
13.47	17.8	0.99	306.72			
14.47		0.80	360.80			
15.47		0.55	401.80			
16.47	18.9	0.27	426.96			
17.47		0.07	437.56			
18.47		0.00	439.80			
19.47	11.7	0.00	439.80			
20.47		0.00	439.80			
21.47		0.00	439.80			
22.47	7.8	0.00	439.80			
23.47		0.00	439.80			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 2 10-11-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63												
1.63	0.000	0.000	0.000	0.000								
2.63	0.000	0.000	0.000	0.000								
3.63	0.000	0.000	0.110	0.110								
4.63	0.000	0.386	0.114	0.500								220
5.63	0.000	0.381	0.117	0.498								
6.63	0.000	0.373	0.121	0.494								
7.63	0.000	0.368	0.123	0.491								
8.63	0.000	0.330	0.156	0.486					0.037	0.308	0.045	
9.63	0.000	0.258	0.215	0.473								
10.63	0.004	0.153	0.301	0.454								420
11.63	0.054	0.051	0.365	0.417								
12.63	0.114	0.000	0.354	0.354								
13.63	0.196	0.000	0.316	0.316								
14.63	0.250	0.000	0.264	0.264					0.272	0.229	0.241	
15.63	0.252	0.000	0.204	0.204								
16.63	0.233	0.000	0.159	0.159								
17.63	0.201	0.000	0.118	0.118								
18.63	0.180	0.000	0.094	0.094								
19.63	0.167	0.000	0.086	0.086								
20.63	0.157	0.000	0.076	0.076								
21.63	0.152	0.000	0.073	0.073								
22.63	0.147	0.000	0.071	0.071								
23.63	0.141	0.000	0.071	0.071								

% POSSIBLE MINUTES OF SUNSHINE 84

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	5.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	5.6	0.22	10.16			
8.63		0.51	54.58			
9.63		0.77	74.86			
10.63	15.6	0.90	126.00			
11.63		1.06	186.08			
12.63		1.10	251.20			
13.63	17.8	1.03	314.54			
14.63		0.62	360.76			
15.63		0.50	393.40			
16.63	17.2	0.22	412.76			
17.63		0.04	419.12			
18.63		0.00	420.00			
19.63	11.7	0.00	420.00			
20.63		0.00	420.00			
21.63		0.00	420.00			
22.63	8.9	0.00	420.00			
23.63		0.00	420.00			

CHAMBER NUMBER 4
DAY 2 OF 2 10-12-76

PROPENE 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.138	0.000	0.070	0.070								
1.63	0.135	0.000	0.069	0.069								
2.63	0.132	0.000	0.066	0.066								
3.63	0.129	0.000	0.067	0.067								
4.63	0.126	0.000	0.067	0.067								
5.63	0.121	0.000	0.067	0.067								
6.63	0.119	0.000	0.067	0.067								
7.63	0.117	0.000	0.067	0.067								
8.63	0.118	0.000	0.067	0.067								
9.63	0.124	0.000	0.069	0.069								
10.63	0.143	0.000	0.071	0.071								
11.63	0.168	0.000	0.071	0.071								
12.63	0.198	0.000	0.071	0.071								
13.63	0.217	0.000	0.071	0.071								
14.63	0.238	0.000	0.071	0.071								
15.63												
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	6.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.03	1.14			
7.63	5.0	0.20	9.40			
8.63		0.51	35.18			
9.63		0.79	74.42			
10.63	13.3	0.97	128.66			
11.63		1.07	190.66			
12.63		1.08	255.24			
13.63	17.8	0.99	316.62			
14.63		0.80	368.80			
15.63		0.55	407.30			
16.63	18.9	0.27	429.66			
17.63		0.07	438.26			
18.63		0.00	439.80			
19.63	11.7	0.00	439.80			
20.63		0.00	439.80			
21.63		0.00	439.80			
22.63	7.8	0.00	439.80			
23.63		0.00	439.80			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 4 10-27-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 6.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.000	0.003	0.001	0.004								
1.13	0.000	0.002	0.000	0.002								
2.13	0.000	0.002	0.000	0.002								
3.13	0.000	0.001	0.000	0.001								
4.13	0.000	0.001	0.001	0.002								
5.13	0.000	0.073	0.020	0.093								
6.13	0.000	0.081	0.019	0.101								310
7.13	0.000	0.080	0.020	0.100								
8.13		0.077	0.020	0.097								
9.13	0.001	0.067	0.027	0.095								
10.47	0.009	0.049	0.042	0.092					0.010	0.053	0.031	
11.13	0.014	0.041	0.050	0.090								710
12.13	0.022	0.032	0.055	0.087								
13.13	0.032	0.025	0.059	0.083								
14.13	0.056	0.019	0.060	0.079					0.057	0.077	0.016	
15.13	0.039	0.015	0.062	0.077								640
16.13	0.033	0.010	0.064	0.073								
17.13	0.026	0.003	0.068	0.071								
18.13	0.020	0.001	0.064	0.065								
19.13	0.018	0.000	0.060	0.060								
20.13	0.016	0.000	0.058	0.058								
21.13	0.014	0.000	0.055	0.055								
22.13	0.013	0.000	0.053	0.053								
23.13	0.012	0.000	0.050	0.050								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	5.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	2.8	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	0.6	0.15	1.80			
8.13		0.41	12.88			
9.13		0.66	39.48			
10.47	6.1	0.84	97.32			
11.13		0.94	131.72			
12.13		0.96	180.28			
13.13	7.8	0.86	245.08			
14.13		0.65	295.00			
15.13		0.43	332.24			
16.13	9.4	0.18	356.04			
17.13		0.01	365.48			
18.13		0.00	366.00			
19.13	4.4	0.00	366.00			
20.13		0.00	366.00			
21.13		0.00	366.00			
22.13	3.3	0.00	366.00			
23.13		0.00	366.00			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 4 10-28-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 6.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.010	0.000	0.049	0.049								
1.13	0.009	0.000	0.046	0.046								
2.13	0.009	0.000	0.044	0.044								
3.13	0.007	0.000	0.042	0.042								
4.13	0.007	0.000	0.041	0.041								
5.13	0.006	0.000	0.039	0.039								
6.13	0.006	0.000	0.038	0.038								
7.13	0.011	0.002	0.033	0.036								
8.13	0.019	0.007	0.028	0.036								
9.13	0.029	0.009	0.028	0.037								
10.47	0.043	0.006	0.027	0.034					0.043	0.030	0.031	0
11.13	0.051	0.005	0.027	0.033								
12.13	0.065	0.004	0.029	0.034								
13.13	0.077	0.002	0.029	0.031								
14.13	0.087	0.002	0.029	0.031								0
15.13	0.091	0.001	0.028	0.029					0.105	0.027	0.010	
16.13	0.089	0.000	0.028	0.028								0
17.13	0.081	0.000	0.027	0.027								
18.13	0.076	0.000	0.023	0.023								
19.13	0.072	0.000	0.021	0.021								
20.13	0.068	0.000	0.020	0.020								
21.13	0.065	0.000	0.019	0.019								
22.13	0.063	0.000	0.019	0.019								
23.13	0.061	0.000	0.018	0.018								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	3.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	0.0	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	-1.7	0.17	1.96			
8.13		0.44	14.32			
9.13		0.69	42.72			
10.47	4.4	0.87	102.96			
11.13		0.96	138.48			
12.13		0.96	196.08			
13.13	7.2	0.87	252.96			
14.13		0.69	303.72			
15.13		0.46	343.28			
16.13	9.4	0.18	368.64			
17.13		0.00	378.00			
18.13		0.00	378.00			
19.13	2.8	0.00	378.00			
20.13		0.00	378.00			
21.13		0.00	378.00			
22.13	-0.6	0.00	378.00			
23.13		0.00	378.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

CHAMBER NUMBER 1
DAY 5 OF 4 10-29-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 6.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.058	0.000	0.018	0.018								
1.13	0.056	0.000	0.018	0.018								
2.13	0.053	0.000	0.018	0.018								
3.13	0.051	0.000	0.017	0.017								
4.13	0.050	0.000	0.017	0.017								
5.13	0.048	0.000	0.017	0.017								
6.13	0.047	0.000	0.016	0.016								0
7.13	0.045	0.000	0.016	0.016								
8.13	0.046	0.000	0.016	0.016								
9.13	0.048	0.000	0.015	0.015					0.061	0.014	0.028	
10.47	0.061	0.000	0.016	0.016								
11.13	0.073	0.000	0.017	0.017								
12.13	0.093	0.001	0.018	0.019								
13.13	0.111	0.001	0.019	0.020								200
14.13	0.124	0.001	0.020	0.021					0.129	0.011	0.023	
15.13	0.127	0.001	0.020	0.021								
16.13	0.127	0.001	0.020	0.021								0
17.13	0.119	0.000	0.020	0.020								
18.13	0.111	0.000	0.020	0.020								
19.13	0.106	0.000	0.019	0.019								
20.13	0.103	0.000	0.019	0.019								
21.13	0.099	0.000	0.018	0.018								
22.13	0.096	0.000	0.018	0.018								
23.13	0.093	0.000	0.017	0.017								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	-1.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	-2.2	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	-2.2	0.17	1.96			
8.13		0.43	14.24			
9.13		0.67	41.96			
10.47	7.2	0.85	100.60			
11.13		0.94	135.52			
12.13		0.95	191.80			
13.13	16.1	0.86	248.08			
14.13		0.68	298.24			
15.13		0.42	336.96			
16.13	17.8	0.14	359.92			
17.13		0.00	367.20			
18.13		0.00	367.20			
19.13	8.3	0.00	367.20			
20.13		0.00	367.20			
21.13		0.00	367.20			
22.13	6.1	0.00	367.20			
23.13		0.00	367.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 17.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 4 OF 4 10-30-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 6.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.091	0.000	0.017	0.017								
1.13	0.089	0.000	0.016	0.016								
2.13	0.087	0.000	0.015	0.015								
3.13	0.084	0.000	0.016	0.016								
4.13	0.082	0.000	0.015	0.015								
5.13	0.081	0.000	0.015	0.015								
6.13	0.079	0.000	0.015	0.015								
7.13	0.077	0.000	0.015	0.015								
8.13	0.075	0.000	0.015	0.015								
9.13	0.073	0.000	0.016	0.016								
10.13	0.072	0.002	0.016	0.018								
11.13	0.072	0.002	0.017	0.019								
12.13	0.074	0.003	0.018	0.021								
13.13	0.074	0.002	0.018	0.020								
14.13												
15.13												
16.13												
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	5.6	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	4.4	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	3.3	0.11	1.48			
8.13		0.26	9.28			
9.13		0.35	25.60			
10.13	11.7	0.43	47.24			
11.13		0.37	72.56			
12.13		0.27	93.96			
13.13	16.1	0.15	109.20			
14.13		0.17	118.36			
15.13		0.07	127.76			
16.13	13.9	0.05	131.80			
17.13		0.00	134.40			
18.13		0.00	134.40			
19.13	14.4	0.00	134.40			
20.13		0.00	134.40			
21.13		0.00	134.40			
22.13	15.0	0.00	134.40			
23.13		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 16.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 4 10-27-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.001	0.003	0.003	0.006								
1.30	0.001	0.002	0.002	0.004								
2.30	0.001	0.002	0.002	0.004								
3.30	0.000	0.001	0.002	0.003								
4.30	0.000	0.001	0.003	0.004								
5.30	0.000	0.165	0.045	0.209								1160
6.30	0.000	0.168	0.045	0.212								
7.30	0.000	0.164	0.045	0.208								
8.30		0.156	0.049	0.205								
9.30	0.001	0.140	0.063	0.203					0.011	0.086	0.012	
10.63	0.006	0.109	0.088	0.197								370
11.30	0.011	0.095	0.099	0.194								
12.30	0.018	0.077	0.114	0.191								
13.30	0.025	0.063	0.125	0.189					0.053*	0.144	0.013	
14.30	0.028	0.050	0.133	0.183								410
15.30	0.027	0.042	0.137	0.178								
16.30	0.017	0.030	0.146	0.176								
17.30	0.004	0.017	0.154	0.171								
18.30	0.000	0.012	0.156	0.168								
19.30	0.000	0.011	0.154	0.164								
20.30	0.000	0.011	0.153	0.163								
21.30	0.000	0.011	0.150	0.160								
22.30	0.000	0.011	0.148	0.158								
23.30	0.000	0.011	0.147	0.157								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	5.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	2.8	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	0.6	0.15	5.30			
8.30		0.41	16.98			
9.30		0.66	46.08			
10.63	6.1	0.84	105.72			
11.30		0.94	141.12			
12.30		0.96	197.88			
13.30	7.8	0.86	253.68			
14.30		0.65	301.50			
15.30		0.43	336.54			
16.30	9.4	0.18	357.84			
17.30		0.01	365.58			
18.30		0.00	366.00			
19.30	4.4	0.00	366.00			
20.30		0.00	366.00			
21.30		0.00	366.00			
22.30	3.3	0.00	366.00			
23.30		0.00	366.00			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 4 10-28-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.000	0.011	0.146	0.156								
1.30	0.000	0.010	0.144	0.153								
2.30	0.000	0.009	0.142	0.150								
3.30	0.000	0.009	0.140	0.148								
4.30	0.000	0.009	0.138	0.146								
5.30	0.000	0.009	0.136	0.144								
6.30	0.000	0.009	0.134	0.142								
7.30	0.014	0.020	0.120	0.141								
8.30	0.030	0.028	0.107	0.135								
9.30	0.043	0.029	0.104	0.133					0.073	0.104	0.042	0
10.63	0.055	0.024	0.101	0.125								
11.30	0.061	0.024	0.101	0.125								
12.30	0.072	0.020	0.101	0.121								
13.30	0.082	0.016	0.102	0.118								0
14.30	0.090	0.012	0.101	0.113					0.119	0.095	0.013	
15.30	0.091	0.009	0.099	0.108								0
16.30	0.081	0.004	0.098	0.102								
17.30	0.068	0.000	0.092	0.092								
18.30	0.058	0.000	0.080	0.080								
19.30	0.051	0.000	0.072	0.072								
20.30	0.046	0.000	0.065	0.065								
21.30	0.043	0.000	0.060	0.060								
22.30	0.040	0.000	0.056	0.056								
23.30	0.036	0.000	0.054	0.054								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	3.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	0.0	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	-1.7	0.17	3.66			
8.30		0.44	18.72			
9.30		0.69	49.62			
10.63	4.4	0.87	111.66			
11.30		0.96	148.08			
12.30		0.96	205.68			
13.30	7.2	0.87	261.66			
14.30		0.69	310.62			
15.30		0.46	347.88			
16.30	9.4	0.18	370.44			
17.30		0.00	378.00			
18.30		0.00	378.00			
19.30	2.8	0.00	378.00			
20.30		0.00	378.00			
21.30		0.00	378.00			
22.30	-0.6	0.00	378.00			
23.30		0.00	378.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

CHAMBER NUMBER 2
DAY 3 OF 4 10-29-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.033	0.000	0.051	0.051								
1.30	0.031	0.000	0.049	0.049								
2.30	0.029	0.000	0.046	0.046								
3.30	0.028	0.000	0.045	0.045								
4.30	0.026	0.000	0.042	0.042								
5.30	0.025	0.000	0.041	0.041								170
6.30	0.024	0.000	0.040	0.040								
7.30	0.026	0.000	0.037	0.037								
8.30	0.032	0.002	0.034	0.037								
9.30	0.044	0.003	0.033	0.037					0.065	0.024	0.009	
10.63	0.074	0.002	0.034	0.037								
11.30	0.096	0.002	0.035	0.038								
12.30	0.136	0.001	0.036	0.037								0
13.30	0.173	0.001	0.036	0.037								
14.30	0.197	0.001	0.036	0.037					0.220	0.016	0.000	
15.30	0.204	0.001	0.036	0.037								0
16.30	0.202	0.000	0.035	0.035								
17.30	0.188	0.000	0.032	0.032								
18.30	0.179	0.000	0.030	0.030								
19.30	0.172	0.000	0.029	0.029								
20.30	0.168	0.000	0.028	0.028								
21.30	0.165	0.000	0.026	0.026								
22.30	0.161	0.000	0.025	0.025								
23.30	0.159	0.000	0.025	0.025								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-1.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-2.2	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	-2.2	0.17	5.66			
8.30		0.43	18.54			
9.30		0.67	48.66			
10.63	7.2	0.85	109.10			
11.30		0.94	148.72			
12.30		0.95	201.30			
13.30	16.1	0.86	256.68			
14.30		0.68	305.04			
15.30		0.42	341.16			
16.30	17.8	0.14	361.32			
17.30		0.00	367.20			
18.30		0.00	367.20			
19.30	8.3	0.00	367.20			
20.30		0.00	367.20			
21.30		0.00	367.20			
22.30	6.1	0.00	367.20			
23.30		0.00	367.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 17.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 4 OF 4 10-30-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 12.0 PPMC/0.20 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.156	0.000	0.024	0.024								
1.30	0.154	0.000	0.024	0.024								
2.30	0.152	0.000	0.024	0.024								
3.30	0.150	0.000	0.023	0.023								
4.30	0.149	0.000	0.023	0.023								
5.30	0.147	0.000	0.023	0.023								
6.30	0.144	0.000	0.023	0.023								
7.30	0.142	0.000	0.023	0.023								
8.30	0.140	0.000	0.023	0.023								
9.30	0.137	0.000	0.024	0.024								
10.30	0.134	0.002	0.024	0.026								
11.30	0.132	0.002	0.025	0.027								
12.30	0.133	0.003	0.026	0.030								
13.30	0.132	0.002	0.026	0.028								
14.30												
15.30												
16.30												
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	5.6	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	4.4	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	3.3	0.11	2.58			
8.30		0.26	11.88			
9.30		0.35	29.10			
10.30	11.7	0.43	51.54			
11.30		0.37	76.26			
12.30		0.27	96.66			
13.30	16.1	0.15	110.70			
14.30		0.17	120.06			
15.30		0.07	128.46			
16.30	13.9	0.05	132.30			
17.30		0.00	134.40			
18.30		0.00	134.40			
19.30	14.4	0.00	134.40			
20.30		0.00	134.40			
21.30		0.00	134.40			
22.30	15.0	0.00	134.40			
23.30		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 16.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 4 10-27-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.000	0.003	0.001	0.004								
1.47	0.000	0.002	0.001	0.003								
2.47	0.000	0.001	0.001	0.002								
3.47	0.000	0.001	0.000	0.001								
4.47	0.000	0.001	0.002	0.003								
5.47	0.000	0.043	0.014	0.057								1700
6.47	0.000	0.041	0.014	0.055								
7.47	0.000	0.041	0.014	0.055								
8.47		0.039	0.015	0.054								
9.47	0.004	0.031	0.021	0.052								
10.80	0.015	0.022	0.027	0.050					0.016	0.031	0.012	1000
11.47	0.021	0.019	0.030	0.050								
12.47	0.032	0.014	0.033	0.047								
13.47	0.042	0.011	0.034	0.045								
14.47	0.046	0.007	0.035	0.043					0.048	0.041	0.000	900
15.47	0.047	0.006	0.035	0.042								
16.47	0.043	0.003	0.036	0.040								
17.47	0.040	0.001	0.035	0.036								
18.47	0.035	0.000	0.033	0.033								
19.47	0.033	0.000	0.030	0.030								
20.47	0.031	0.000	0.027	0.027								
21.47	0.030	0.000	0.025	0.025								
22.47	0.028	0.000	0.023	0.023								
23.47	0.027	0.000	0.022	0.022								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	5.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	2.8	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	0.6	0.15	4.80			
8.47		0.41	21.08			
9.47		0.66	52.68			
10.80	6.1	0.84	114.12			
11.47		0.94	150.52			
12.47		0.96	207.48			
13.47	7.8	0.86	262.28			
14.47		0.65	308.00			
15.47		0.43	340.84			
16.47	9.4	0.18	359.64			
17.47		0.01	365.68			
18.47		0.00	366.00			
19.47	4.4	0.00	366.00			
20.47		0.00	366.00			
21.47		0.00	366.00			
22.47	3.3	0.00	366.00			
23.47		0.00	366.00			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 4 10-28-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.025	0.000	0.021	0.021								
1.47	0.024	0.000	0.020	0.020								
2.47	0.022	0.000	0.018	0.018								
3.47	0.021	0.000	0.017	0.017								
4.47	0.020	0.000	0.017	0.017								
5.47	0.019	0.000	0.016	0.016								
6.47	0.019	0.000	0.016	0.016								
7.47	0.020	0.000	0.014	0.014								
8.47	0.024	0.001	0.012	0.013								
9.47	0.032	0.001	0.012	0.013					0.036	0.015	0.009	340
10.80	0.047	0.001	0.013	0.014								
11.47	0.057	0.001	0.014	0.015								
12.47	0.071	0.000	0.014	0.014								
13.47	0.082	0.000	0.015	0.015								420
14.47	0.091	0.000	0.015	0.015					0.095	0.012	0.098	
15.47	0.095	0.000	0.015	0.015								350
16.47	0.089	0.000	0.015	0.015								
17.47	0.084	0.000	0.015	0.015								
18.47	0.080	0.000	0.014	0.014								
19.47	0.077	0.000	0.013	0.013								
20.47	0.076	0.000	0.013	0.013								
21.47	0.074	0.000	0.013	0.013								
22.47	0.072	0.000	0.013	0.013								
23.47	0.070	0.000	0.013	0.013								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	3.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	0.0	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	-1.7	0.17	5.56			
8.47		0.44	23.12			
9.47		0.69	56.52			
10.80	4.4	0.87	120.36			
11.47		0.96	157.68			
12.47		0.96	215.28			
13.47	7.2	0.87	270.36			
14.47		0.69	317.52			
15.47		0.46	352.08			
16.47	9.4	0.18	372.24			
17.47		0.00	378.00			
18.47		0.00	378.00			
19.47	2.8	0.00	378.00			
20.47		0.00	378.00			
21.47		0.00	378.00			
22.47	-0.6	0.00	378.00			
23.47		0.00	378.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

CHAMBER NUMBER 3
DAY 3 OF 4 10-29-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.067	0.000	0.014	0.014								
1.47	0.065	0.000	0.014	0.014								
2.47	0.063	0.000	0.014	0.014								
3.47	0.062	0.000	0.013	0.013								
4.47	0.061	0.000	0.013	0.013								
5.47	0.059	0.000	0.013	0.013								
6.47	0.058	0.000	0.013	0.013								
7.47	0.057	0.000	0.013	0.013								260
8.47	0.057	0.000	0.013	0.013								
9.47	0.059	0.000	0.013	0.013								
10.80	0.071	0.000	0.014	0.014					0.060	0.009	0.025	
11.47	0.079	0.000	0.014	0.014								
12.47	0.093	0.000	0.015	0.015								
13.47	0.108	0.000	0.016	0.016								
14.47	0.118	0.000	0.016	0.016								350
15.47	0.120	0.000	0.017	0.017					0.116	0.011	0.003	
16.47	0.116	0.000	0.017	0.017								
17.47	0.109	0.000	0.017	0.017								200
18.47	0.103	0.000	0.016	0.016								
19.47	0.098	0.000	0.016	0.016								
20.47	0.095	0.000	0.015	0.015								
21.47	0.092	0.000	0.015	0.015								
22.47	0.089	0.000	0.014	0.014								
23.47	0.087	0.000	0.015	0.015								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-1.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-2.2	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	-2.2	0.17	5.36			
8.47		0.43	22.84			
9.47		0.67	55.36			
10.80	7.2	0.85	117.60			
11.47		0.94	154.12			
12.47		0.95	210.80			
13.47	16.1	0.86	265.28			
14.47		0.68	311.84			
15.47		0.42	345.36			
16.47	17.8	0.14	362.72			
17.47		0.00	367.20			
18.47		0.00	367.20			
19.47	8.3	0.00	367.20			
20.47		0.00	367.20			
21.47		0.00	367.20			
22.47	6.1	0.00	367.20			
23.47		0.00	367.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 17.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 4 OF 4 10-30-76

PROPANE 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.084	0.000	0.014	0.014								
1.47	0.082	0.000	0.013	0.013								
2.47	0.080	0.000	0.013	0.013								
3.47	0.079	0.000	0.013	0.013								
4.47	0.077	0.000	0.013	0.013								
5.47	0.076	0.000	0.012	0.012								
6.47	0.074	0.000	0.012	0.012								
7.47	0.073	0.000	0.012	0.012								
8.47	0.071	0.000	0.012	0.012								
9.47	0.070	0.001	0.012	0.013								
10.47	0.070	0.001	0.013	0.014								
11.47	0.072	0.001	0.014	0.015								
12.47	0.073	0.002	0.014	0.016								
13.47	0.072	0.002	0.014	0.016								
14.47												
15.47												
16.47												
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	5.6	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	4.4	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	3.3	0.11	3.68			
8.47		0.26	14.48			
9.47		0.35	32.60			
10.47	11.7	0.43	55.84			
11.47		0.37	79.96			
12.47		0.27	99.36			
13.47	16.1	0.15	112.20			
14.47		0.17	121.76			
15.47		0.07	129.16			
16.47	13.9	0.05	132.80			
17.47		0.00	134.40			
18.47		0.00	134.40			
19.47	14.4	0.00	134.40			
20.47		0.00	134.40			
21.47		0.00	134.40			
22.47	15.0	0.00	134.40			
23.47		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 16.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 4 10-27-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.003	0.001	0.004								
1.63	0.000	0.002	0.001	0.003								
2.63	0.000	0.001	0.001	0.002								
3.63	0.000	0.001	0.001	0.002								
4.63	0.000	0.001	0.002	0.003								
5.63	0.000	0.042	0.015	0.057								
6.63	0.000	0.041	0.014	0.055								
7.63		0.041	0.013	0.054								480
8.63		0.042	0.012	0.054								
9.63	0.000	0.043	0.011	0.054								
10.97	0.000	0.041	0.013	0.054								
11.63	0.001	0.039	0.014	0.053					0.003	0.019	0.009	
12.63	0.001	0.037	0.015	0.053								215
13.63	0.002	0.035	0.015	0.050								
14.63	0.001	0.033	0.017	0.050								
15.63	0.000	0.031	0.017	0.048					0.003	0.025	0.000	
16.63	0.000	0.028	0.019	0.047								200
17.63	0.000	0.025	0.020	0.045								
18.63	0.000	0.024	0.021	0.045								
19.63	0.000	0.022	0.020	0.043								
20.63	0.000	0.022	0.020	0.043								
21.63	0.000	0.022	0.019	0.042								
22.63	0.000	0.021	0.019	0.041								
23.63	0.000	0.021	0.019	0.041								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	5.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	2.8	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	0.6	0.15	6.30			
8.63		0.41	25.18			
9.63		0.66	59.28			
10.97	6.1	0.84	122.52			
11.63		0.94	159.92			
12.63		0.96	217.08			
13.63	7.8	0.86	270.88			
14.63		0.65	314.50			
15.63		0.43	345.14			
16.63	9.4	0.18	361.44			
17.63		0.01	365.78			
18.63		0.00	366.00			
19.63	4.4	0.00	366.00			
20.63		0.00	366.00			
21.63		0.00	366.00			
22.63	3.3	0.00	366.00			
23.63		0.00	366.00			

% POSSIBLE MINUTES OF SUNSHINE 98

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 4 10-28-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.020	0.019	0.040								
1.63	0.000	0.019	0.018	0.037								
2.63	0.000	0.019	0.018	0.037								
3.63	0.000	0.018	0.018	0.036								
4.63	0.000	0.018	0.017	0.035								
5.63	0.000	0.017	0.017	0.034								
6.63	0.000	0.017	0.017	0.034								
7.63	0.003	0.019	0.015	0.034								
8.63	0.005	0.020	0.014	0.034								
9.63	0.007	0.020	0.014	0.034								
10.97	0.010	0.019	0.014	0.033					0.003	0.023	0.053	240
11.63	0.011	0.018	0.015	0.033								
12.63	0.013	0.017	0.015	0.032								
13.63	0.013	0.016	0.016	0.032								
14.63	0.014	0.015	0.017	0.032								300
15.63	0.012	0.012	0.018	0.030					0.018	0.025	0.086	
16.63	0.006	0.007	0.020	0.028								270
17.63	0.001	0.002	0.025	0.027								
18.63	0.000	0.001	0.026	0.027								
19.63	0.000	0.001	0.026	0.027								
20.63	0.000	0.001	0.025	0.026								
21.63	0.000	0.001	0.025	0.026								
22.63	0.000	0.001	0.025	0.026								
23.63	0.000	0.001	0.025	0.026								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	3.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	0.0	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	-1.7	0.17	7.06			
8.63		0.44	27.52			
9.63		0.69	63.42			
10.97	4.4	0.87	129.06			
11.63		0.96	167.28			
12.63		0.96	224.88			
13.63	7.2	0.87	279.06			
14.63		0.69	324.42			
15.63		0.46	357.08			
16.63	9.4	0.18	374.04			
17.63		0.00	378.00			
18.63		0.00	378.00			
19.63	2.8	0.00	378.00			
20.63		0.00	378.00			
21.63		0.00	378.00			
22.63	-0.6	0.00	378.00			
23.63		0.00	378.00			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 9.4 CENT

CHAMBER NUMBER 4
DAY 5 OF 4 10-29-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.000	0.002	0.025	0.027								
1.63	0.000	0.002	0.025	0.027								
2.63	0.000	0.002	0.025	0.027								
3.63	0.000	0.003	0.025	0.029								
4.63	0.000	0.003	0.024	0.027								
5.63	0.000	0.003	0.024	0.027								
6.63	0.001	0.004	0.023	0.028								280
7.63	0.006	0.010	0.019	0.029								
8.63	0.010	0.012	0.017	0.029								
9.63	0.012	0.014	0.015	0.029					0.012	0.021	0.059	
10.97	0.016	0.014	0.017	0.031								
11.63	0.019	0.014	0.017	0.031								
12.63	0.026	0.013	0.019	0.032								
13.63	0.031	0.012	0.019	0.031								230
14.63	0.033	0.010	0.020	0.030					0.033	0.025	0.030	
15.63	0.032	0.006	0.021	0.028								
16.63	0.028	0.002	0.022	0.024								0
17.63	0.022	0.000	0.023	0.023								
18.63	0.020	0.000	0.023	0.023								
19.63	0.018	0.000	0.022	0.022								
20.63	0.017	0.000	0.022	0.022								
21.63	0.015	0.000	0.021	0.021								
22.63	0.014	0.000	0.020	0.020								
23.63	0.013	0.000	0.020	0.020								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	-1.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	-2.2	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	-2.2	0.17	7.06			
8.63		0.43	27.14			
9.63		0.67	62.06			
10.97	7.2	0.85	126.10			
11.63		0.94	163.52			
12.63		0.95	220.30			
13.63	16.1	0.86	273.88			
14.63		0.68	318.64			
15.63		0.42	349.56			
16.63	17.8	0.14	364.12			
17.63		0.00	367.20			
18.63		0.00	367.20			
19.63	8.3	0.00	367.20			
20.63		0.00	367.20			
21.63		0.00	367.20			
22.63	6.1	0.00	367.20			
23.63		0.00	367.20			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 17.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 4 OF 4 10-30-76

NO OXIDATION 0% DILUTION
TARGET INITIAL HC/NOX: 0.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.012	0.000	0.019	0.019								
1.63	0.011	0.000	0.019	0.019								
2.63	0.011	0.000	0.019	0.019								
3.63	0.010	0.000	0.018	0.018								
4.63	0.009	0.000	0.018	0.018								
5.63	0.009	0.000	0.017	0.017								
6.63	0.007	0.000	0.016	0.016								
7.63	0.011	0.001	0.015	0.016								
8.63	0.013	0.001	0.013	0.014								
9.63	0.015	0.002	0.012	0.014								
10.63	0.019	0.003	0.013	0.016								
11.63	0.022	0.004	0.014	0.018								
12.63	0.025	0.004	0.015	0.019								
13.63	0.025	0.004	0.015	0.019								
14.63												
15.63												
16.63												
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	5.6	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	4.4	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.38			
7.63	3.3	0.11	4.78			
8.63		0.26	17.08			
9.63		0.35	36.10			
10.63	11.7	0.43	60.14			
11.63		0.37	83.66			
12.63		0.27	102.06			
13.63	16.1	0.15	113.70			
14.63		0.17	123.46			
15.63		0.07	129.86			
16.63	13.9	0.05	133.30			
17.63		0.00	134.40			
18.63		0.00	134.40			
19.63	14.4	0.00	134.40			
20.63		0.00	134.40			
21.63		0.00	134.40			
22.63	15.0	0.00	134.40			
23.63		0.00	134.40			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 16.7 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 1 OF 4 11- 5-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13												
1.13	0.000	0.000	0.000	0.000								
2.13	0.000	0.000	0.000	0.000								
3.13	0.000	0.000	0.000	0.000								
4.13	0.000	0.000	0.000	0.000								
5.13	0.000	0.437	0.104	0.542								
6.13	0.000	0.432	0.105	0.537								
7.13	0.000	0.422	0.108	0.530								
8.13	0.000	0.402	0.122	0.524								
9.13	0.000	0.358	0.161	0.519								
10.13	0.004	0.264	0.240	0.504					0.055 *	0.218	0.116	
11.13	0.021	0.141	0.336	0.477								
12.13	0.076	0.050	0.390	0.440								290
13.13	0.171	0.017	0.370	0.387								
14.13	0.225	0.014	0.305	0.319								
15.13	0.235	0.003	0.243	0.246					0.357 *	0.180	0.247	
16.13	0.212	0.003	0.183	0.187								
17.13	0.182	0.002	0.140	0.142								
18.13	0.155	0.002	0.113	0.115								
19.13	0.139	0.002	0.102	0.104								
20.13	0.126	0.002	0.089	0.091								
21.13	0.118	0.002	0.079	0.081								
22.13	0.109	0.001	0.071	0.072								
23.13	0.103	0.000	0.070	0.070								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	7.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	5.6	0.00	0.00			
5.13		0.00	0.00			
6.13		0.01	0.08			
7.13	1.1	0.15	1.80			
8.13		0.40	12.80			
9.13		0.64	38.72			
10.13	7.8	0.80	78.40			
11.13		0.89	127.12			
12.13		0.90	180.60			
13.13	11.1	0.73	233.24			
14.13		0.50	275.20			
15.13		0.29	303.52			
16.13	10.0	0.15	319.80			
17.13		0.01	327.68			
18.13		0.00	328.20			
19.13	5.6	0.00	328.20			
20.13		0.00	328.20			
21.13		0.00	328.20			
22.13	2.8	0.00	328.20			
23.13		0.00	328.20			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 11.7 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 4 11- 6-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.096	0.000	0.069	0.069								
1.13	0.094	0.000	0.068	0.068								
2.13	0.089	0.000	0.068	0.068								
3.13	0.086	0.000	0.067	0.067								
4.13	0.083	0.000	0.066	0.066								
5.13	0.080	0.000	0.067	0.067								
6.13	0.076	0.000	0.068	0.068								
7.13	0.075	0.000	0.069	0.069								
8.13	0.070	0.001	0.073	0.074								0
9.13	0.068	0.002	0.071	0.074								
10.53	0.078	0.002	0.073	0.075								
11.13	0.089	0.001	0.075	0.076					0.138			
12.13	0.108	0.001	0.075	0.076							0.163	
13.13	0.128	0.001	0.075	0.076								
14.13	0.143	0.002	0.073	0.075								
15.13	0.150	0.002	0.072	0.074					0.215	0.023	0.153	
16.13	0.147	0.002	0.071	0.074								
17.13	0.140	0.002	0.068	0.071								
18.13	0.127	0.001	0.065	0.066								
19.13	0.128	0.001	0.061	0.063								
20.13	0.123	0.001	0.057	0.059								
21.13	0.121	0.000	0.056	0.056								
22.13	0.118	0.000	0.056	0.056								
23.13	0.113	0.000	0.056	0.056								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	-1.1	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	-1.7	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	-2.8	0.15	1.20			
8.13		0.40	12.20			
9.13		0.64	38.12			
10.53	8.3	0.81	97.32			
11.13		0.91	127.28			
12.13		0.91	181.88			
13.13	12.2	0.82	235.76			
14.13		0.64	283.52			
15.13		0.40	320.00			
16.13	13.9	0.13	341.84			
17.13		0.00	348.60			
18.13		0.00	348.60			
19.13	7.8	0.00	348.60			
20.13		0.00	348.60			
21.13		0.00	348.60			
22.13	5.6	0.00	348.60			
23.13		0.00	348.60			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 14.4 CENT

CHAMBER NUMBER 1
DAY 5 OF 4 11- 7-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.111	0.000	0.055	0.055								
1.13	0.108	0.000	0.055	0.055								
2.13	0.105	0.000	0.054	0.054								
3.13	0.103	0.000	0.054	0.054								
4.13	0.102	0.000	0.053	0.053								
5.13	0.099	0.000	0.053	0.053								
6.13	0.097	0.000	0.053	0.053								
7.13	0.096	0.001	0.053	0.054								
8.13	0.094	0.002	0.055	0.057								
9.13	0.092	0.003	0.056	0.059								0
10.47	0.099	0.003	0.059	0.063								
11.13	0.114	0.003	0.059	0.063					0.150	0.016	0.078	
12.13	0.142	0.004	0.059	0.064								
13.13	0.170	0.004	0.059	0.064								200
14.13	0.191	0.003	0.058	0.062								
15.13	0.198	0.003	0.056	0.060								
16.13	0.196	0.003	0.056	0.059					0.210	0.029	0.059	
17.13	0.188	0.003	0.053	0.056								
18.13	0.181	0.003	0.052	0.055								
19.13	0.176	0.003	0.051	0.054								
20.13	0.173	0.003	0.050	0.053								
21.13	0.169	0.004	0.049	0.053								
22.13	0.164	0.003	0.047	0.050								
23.13	0.159	0.003	0.045	0.048								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	2.8	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	1.7	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	0.6	0.00	0.00			
8.13		0.13	1.04			
9.13		0.37	10.76			
10.47	11.1	0.75	51.00			
11.13		0.83	81.64			
12.13		0.84	131.52			
13.13	17.8	0.75	181.20			
14.13		0.59	224.92			
15.13		0.31	258.08			
16.13	18.3	0.08	274.84			
17.13		0.00	279.00			
18.13		0.00	279.00			
19.13	12.8	0.00	279.00			
20.13		0.00	279.00			
21.13		0.00	279.00			
22.13	12.8	0.00	279.00			
23.13		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 4 OF 4 11- 8-76

PROPENE, NO SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 1.5 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.154											
1.13	0.148											
2.13	0.142											
3.13	0.137											
4.13	0.132											
5.13	0.128											
6.13	0.067											
7.13	0.062											
8.13	0.061											
9.13	0.062								0.101	0.034	0.090	
10.13	0.068											
11.13	0.079											
12.13	0.087											
13.13	0.098											
14.13	0.103								0.144	0.035	0.035	
15.13	0.105											
16.13	0.101											
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	6.7	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	1.1	0.13	1.04			
8.13		0.38	10.84			
9.13		0.62	35.56			
10.13	2.8	0.84	74.52			
11.13		0.66	123.48			
12.13		0.88	164.84			
13.13	4.4	0.72	216.36			
14.13		0.67	259.16			
15.13		0.39	297.12			
16.13	4.4	0.13	318.44			
17.13		0.00	325.20			
18.13		0.00	325.20			
19.13	0.6	0.00	325.20			
20.13		0.00	325.20			
21.13		0.00	325.20			
22.13	-2.2	0.00	325.20			
23.13		0.00	325.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 10.6 CENT

* A second injection took place at 0600 EST 8 Nov 76.
Target injection: 0.05 ppm NO.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 4 11- 5-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 4.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30												
1.30	0.000	0.005	0.006	0.011								
2.30	0.000	0.004	0.006	0.010								
3.30	0.000	0.002	0.006	0.008								
4.30	0.000	0.000	0.005	0.005								
5.30	0.000	0.453	0.095	0.549								
6.30	0.000	0.447	0.100	0.547								
7.30	0.000	0.437	0.106	0.543								
8.30	0.000	0.396	0.139	0.534								
9.30	0.005	0.271	0.257	0.527								
10.30	0.096	0.047	0.442	0.489					0.195*	0.507	0.260	
11.30	0.503	0.003	0.349	0.352								
12.30	0.710	0.002	0.243	0.245								650
13.30	0.634	0.002	0.232	0.234								
14.30	0.561	0.002	0.228	0.230								
15.30	0.513	0.002	0.224	0.226					0.733*	0.024	0.556	
16.30	0.478	0.003	0.219	0.222								
17.30	0.456	0.002	0.213	0.215								
18.30	0.437	0.002	0.208	0.210								
19.30	0.421	0.002	0.201	0.203								
20.30	0.407	0.002	0.187	0.189								
21.30	0.396	0.002	0.180	0.183								
22.30	0.386	0.001	0.174	0.176								
23.30	0.378	0.000	0.173	0.173								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	7.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	5.6	0.00	0.00			
5.30		0.00	0.00			
6.30		0.01	0.18			
7.30	1.1	0.15	3.30			
8.30		0.40	16.80			
9.30		0.64	45.12			
10.30	7.8	0.80	86.40			
11.30		0.89	136.02			
12.30		0.90	189.60			
13.30	11.1	0.73	240.54			
14.30		0.50	280.20			
15.30		0.29	306.42			
16.30	10.0	0.15	321.30			
17.30		0.01	327.78			
18.30		0.00	328.20			
19.30	5.6	0.00	328.20			
20.30		0.00	328.20			
21.30		0.00	328.20			
22.30	2.8	0.00	328.20			
23.30		0.00	328.20			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 11.7 CENT

* Data supsect but retained.

CHAMBER NUMBER 2
DAY 2 OF 4 11- 6-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 4.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.373	0.000	0.172	0.172								
1.30	0.370	0.000	0.171	0.171								
2.30	0.364	0.000	0.170	0.170								
3.30	0.360	0.000	0.168	0.168								
4.30	0.356	0.000	0.168	0.168								
5.30	0.353	0.000	0.168	0.168								
6.30	0.349	0.000	0.169	0.169								250
7.30	0.345	0.000	0.170	0.170								
8.30	0.336	0.001	0.187	0.188								
9.30	0.327	0.002	0.184	0.187								
10.70	0.321	0.002	0.188	0.190								
11.30	0.321	0.000	0.189	0.189					0.465 *	0.042		
12.30	0.330	0.001	0.186	0.187							0.326	
13.30	0.339	0.001	0.185	0.186								
14.30	0.348	0.001	0.184	0.185								
15.30	0.348	0.000	0.181	0.181					0.507 *	0.025	0.267	
16.30	0.340	0.000	0.178	0.178								
17.30	0.330	0.000	0.175	0.175								
18.30	0.314	0.002	0.165	0.167								
19.30	0.311	0.001	0.159	0.160								
20.30	0.306	0.001	0.152	0.153								
21.30	0.301	0.001	0.149	0.150								
22.30	0.296	0.001	0.148	0.149								
23.30	0.292	0.000	0.146	0.146								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-1.1	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-1.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	-2.8	0.15	2.70			
8.30		0.40	16.20			
9.30		0.64	44.52			
10.70	8.3	0.81	105.42			
11.30		0.91	136.38			
12.30		0.91	190.98			
13.30	12.2	0.82	243.96			
14.30		0.64	289.92			
15.30		0.40	324.00			
16.30	13.9	0.13	343.14			
17.30		0.00	348.60			
18.30		0.00	348.60			
19.30	7.8	0.00	348.60			
20.30		0.00	348.60			
21.30		0.00	348.60			
22.30	5.6	0.00	348.60			
23.30		0.00	348.60			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 14.4 CENT

* Data supsect but retained.

CHAMBER NUMBER 2
DAY 3 OF 4 11- 7-76

PROPENE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 4.0 PPMC/0.50 PPM

TIME (LST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.286	0.000	0.144	0.144								
1.30	0.282	0.000	0.143	0.143								
2.30	0.279	0.000	0.141	0.141								
3.30	0.276	0.000	0.140	0.140								
4.30	0.273	0.000	0.140	0.140								
5.30	0.272	0.000	0.139	0.139								
6.30	0.268	0.000	0.137	0.137								0
7.30	0.267	0.001	0.139	0.140								
8.30	0.264	0.002	0.141	0.143								
9.30	0.260	0.003	0.149	0.152					0.398 *	0.013	0.193	
10.63	0.266	0.003	0.152	0.155								
11.30	0.268	0.003	0.152	0.155								230
12.30	0.308	0.003	0.152	0.155								
13.30	0.338	0.004	0.150	0.154								
14.30	0.363	0.003	0.149	0.152					0.668 *	0.023	0.120	
15.30	0.368	0.003	0.147	0.150								
16.30	0.358	0.003	0.144	0.147								
17.30	0.348	0.002	0.138	0.140								
18.30	0.339	0.003	0.134	0.137								
19.30	0.332	0.003	0.132	0.135								
20.30	0.326	0.004	0.130	0.134								
21.30	0.323	0.004	0.128	0.132								
22.30	0.317	0.004	0.126	0.130								
23.30	0.310	0.003	0.124	0.127								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	2.8	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	1.7	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	0.6	0.00	0.00			
8.30		0.13	2.54			
9.30		0.37	14.46			
10.63	11.1	0.75	58.50			
11.30		0.83	89.94			
12.30		0.84	139.92			
13.30	17.8	0.75	188.70			
14.30		0.59	230.82			
15.30		0.31	261.18			
16.30	18.3	0.08	275.64			
17.30		0.00	279.00			
18.30		0.00	279.00			
19.30	12.8	0.00	279.00			
20.30		0.00	279.00			
21.30		0.00	279.00			
22.30	12.8	0.00	279.00			
23.30		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 4 OF 4 11- 8-76

PROPENE, NO SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 4.0 PPMC/0.50 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.305											
1.30	0.296											
2.30	0.289											
3.30	0.283											
4.30	0.276											
5.30	0.272											
6.30	0.203											
7.30	0.191											
8.30	0.185											
9.30	0.183											
10.30	0.191											
11.30	0.198								0.287 **	0.012	0.116	
12.30	0.193											
13.30	0.193											
14.30	0.190											
15.30	0.186											
16.30	0.181								0.274 **	0.020	0.071	
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	6.7	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	3.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	1.1	0.13	2.34			
8.30		0.38	14.64			
9.30		0.62	41.76			
10.30	2.8	0.84	82.92			
11.30		0.66	130.08			
12.30		0.88	173.64			
13.30	4.4	0.72	223.56			
14.30		0.67	265.86			
15.30		0.39	301.02			
16.30	4.4	0.13	319.74			
17.30		0.00	325.20			
18.30		0.00	325.20			
19.30	0.6	0.00	325.20			
20.30		0.00	325.20			
21.30		0.00	325.20			
22.30	-2.2	0.00	325.20			
23.30		0.00	325.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 10.6 CENT

* A second injection took place at 0600 EST, 8 Nov 76 target injection: 0.05 ppm NO.

** Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 1 OF 4 11- 5-76

PROPANE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47												
1.47	0.000	0.004	0.005	0.009								
2.47	0.000	0.003	0.005	0.008								
3.47	0.000	0.001	0.005	0.006								
4.47	0.000	0.000	0.004	0.004								
5.47	0.000	0.046	0.015	0.061								
6.47	0.000	0.046	0.015	0.061								
7.47	0.000	0.046	0.014	0.060								
8.47	0.003	0.044	0.016	0.060								
9.47	0.007	0.037	0.021	0.058								
10.47	0.014	0.029	0.027	0.056					0.002*	0.049*	0.054	
11.47	0.021	0.021	0.033	0.054								
12.47	0.032	0.016	0.037	0.053								1200
13.47	0.040	0.014	0.038	0.052								
14.47	0.040	0.006	0.043	0.049					0.049	0.045	0.052	
15.47	0.041	0.005	0.040	0.045								
16.47	0.037	0.004	0.040	0.044								
17.47	0.032	0.002	0.040	0.042								
18.47	0.031	0.002	0.041	0.043								
19.47	0.028	0.002	0.033	0.035								
20.47	0.026	0.001	0.029	0.030								
21.47	0.024	0.001	0.028	0.029								
22.47	0.021	0.000	0.027	0.027								
23.47	0.021	0.000	0.027	0.027								

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	7.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.6	0.00	0.00			
5.47		0.00	0.00			
6.47		0.01	0.28			
7.47	1.1	0.15	4.80			
8.47		0.40	20.80			
9.47		0.64	51.52			
10.47	7.8	0.80	94.40			
11.47		0.89	144.92			
12.47		0.90	198.60			
13.47	11.1	0.73	247.84			
14.47		0.50	285.20			
15.47		0.29	309.32			
16.47	10.0	0.15	322.80			
17.47		0.01	327.88			
18.47		0.00	328.20			
19.47	5.6	0.00	328.20			
20.47		0.00	328.20			
21.47		0.00	328.20			
22.47	2.8	0.00	328.20			
23.47		0.00	328.20			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 11.7 CENT

* Data suspect but retained.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 2 OF 4 11- 6-76

PROPANE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.019	0.000	0.026	0.026								
1.47	0.018	0.000	0.025	0.025								
2.47	0.017	0.000	0.025	0.025								
3.47	0.016	0.000	0.024	0.024								
4.47	0.015	0.000	0.023	0.023								
5.47	0.015	0.000	0.022	0.022								
6.47	0.014	0.000	0.022	0.022								
7.47	0.016	0.002	0.018	0.020								220
8.47	0.021	0.006	0.017	0.023								
9.47	0.029	0.006	0.016	0.022								
10.87	0.048	0.005	0.017	0.022								
11.47	0.057	0.002	0.018	0.020					0.060			
12.47	0.075	0.001	0.019	0.020							0.003	
13.47	0.089	0.001	0.019	0.020								
14.47	0.096	0.001	0.018	0.019								
15.47	0.099	0.002	0.018	0.020					0.110	0.018	0.055	
16.47	0.096	0.002	0.017	0.019								
17.47	0.090	0.002	0.016	0.018								
18.47	0.086	0.001	0.015	0.016								
19.47	0.083	0.001	0.014	0.015								
20.47	0.081	0.000	0.013	0.013								
21.47	0.079	0.000	0.012	0.012								
22.47	0.077	0.000	0.012	0.012								
23.47	0.074	0.000	0.012	0.012								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-1.1	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-1.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	-2.8	0.15	4.20			
8.47		0.40	20.20			
9.47		0.64	50.92			
10.87	8.3	0.81	113.52			
11.47		0.91	145.48			
12.47		0.91	200.08			
13.47	12.2	0.82	252.16			
14.47		0.64	296.32			
15.47		0.40	328.00			
16.47	13.9	0.13	344.44			
17.47		0.00	348.60			
18.47		0.00	348.60			
19.47	7.8	0.00	348.60			
20.47		0.00	348.60			
21.47		0.00	348.60			
22.47	5.6	0.00	348.60			
23.47		0.00	348.60			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 14.4 CENT

CHAMBER NUMBER 3
DAY 3 OF 4 11- 7-76

PROPANE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.072	0.000	0.012	0.012								
1.47	0.070	0.000	0.012	0.012								
2.47	0.068	0.000	0.011	0.011								
3.47	0.067	0.000	0.011	0.011								
4.47	0.066	0.000	0.011	0.011								
5.47	0.065	0.000	0.011	0.011								
6.47	0.064	0.000	0.010	0.010								
7.47	0.063	0.001	0.011	0.012								0
8.47	0.061	0.002	0.011	0.013								
9.47	0.061	0.002	0.011	0.013					0.079	0.007	0.022	
10.80	0.068	0.003	0.012	0.015								380
11.47	0.074	0.003	0.013	0.016								
12.47	0.086	0.003	0.014	0.017								
13.47	0.096	0.003	0.015	0.018								
14.47	0.103	0.002	0.014	0.016					0.105	0.021	0.036	
15.47	0.104	0.002	0.014	0.016								
16.47	0.102	0.002	0.014	0.016								
17.47	0.099	0.002	0.014	0.016								
18.47	0.095	0.002	0.013	0.015								
19.47	0.093	0.002	0.012	0.014								
20.47	0.091	0.003	0.012	0.015								
21.47	0.090	0.003	0.011	0.014								
22.47	0.087	0.003	0.011	0.014								
23.47	0.084	0.003	0.010	0.013								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	2.8	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	1.7	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	0.6	0.00	0.00			
8.47		0.13	3.64			
9.47		0.37	18.16			
10.80	11.1	0.75	66.00			
11.47		0.83	98.24			
12.47		0.84	148.52			
13.47	17.8	0.75	196.20			
14.47		0.59	236.72			
15.47		0.31	264.28			
16.47	18.3	0.08	276.44			
17.47		0.00	279.00			
18.47		0.00	279.00			
19.47	12.8	0.00	279.00			
20.47		0.00	279.00			
21.47		0.00	279.00			
22.47	12.8	0.00	279.00			
23.47		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 3
DAY 4 OF 4 11- 8-76

PROPANE, NO SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.081											
1.47	0.079											
2.47	0.077											
3.47	0.075											
4.47	0.073											
5.47	0.070											
6.47	0.006											
7.47	0.015											
8.47	0.022											
9.47	0.027											
10.47	0.030								0.041	0.035	0.050	
11.47	0.033											
12.47	0.036											
13.47	0.039											
14.47	0.040											
15.47	0.037								0.043	0.040	0.009	
16.47	0.033											
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	6.7	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	3.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	1.1	0.13	5.64			
8.47		0.38	18.44			
9.47		0.62	47.96			
10.47	2.8	0.84	91.32			
11.47		0.66	136.68			
12.47		0.88	182.44			
13.47	4.4	0.72	230.76			
14.47		0.67	272.56			
15.47		0.39	304.92			
16.47	4.4	0.13	321.04			
17.47		0.00	325.20			
18.47		0.00	325.20			
19.47	0.6	0.00	325.20			
20.47		0.00	325.20			
21.47		0.00	325.20			
22.47	-2.2	0.00	325.20			
23.47		0.00	325.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 10.6 CENT

* A second injection took place at 0600 EST 8 Nov 76.
Target injection: 0.05 ppm NO.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 1 OF 4 11- 5-76

PROPANE, NO SLUG 0% DILUTION *
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63												
1.63	0.000	0.003	0.003	0.006								
2.63	0.000	0.002	0.002	0.004								
3.63	0.000	0.002	0.002	0.004								
4.63	0.000	0.000	0.000	0.000								
5.63	0.000	0.000	0.046	0.046								
6.63	0.000	0.001	0.043	0.044								
7.63	0.011	0.012	0.033	0.044								
8.63	0.018	0.016	0.028	0.044								
9.63	0.025	0.016	0.027	0.043								
10.63	0.032	0.014	0.028	0.042					0.058**	0.052**	0.035	
11.63	0.042	0.011	0.030	0.040								475
12.63	0.051	0.009	0.030	0.038								
13.63	0.060	0.007	0.032	0.039								
14.63	0.062	0.005	0.032	0.037					0.063	0.038	0.049	
15.63	0.060	0.004	0.032	0.036								
16.63	0.055	0.003	0.032	0.035								
17.63	0.050	0.002	0.029	0.031								
18.63	0.047	0.002	0.026	0.028								
19.63	0.043	0.002	0.023	0.025								
20.63	0.041	0.001	0.021	0.022								
21.63	0.037	0.001	0.019	0.020								
22.63	0.036	0.000	0.017	0.017								
23.63	0.035	0.000	0.017	0.017								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	7.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.6	0.00	0.00			
5.63		0.00	0.00			
6.63		0.01	0.58			
7.63	1.1	0.15	6.30			
8.63		0.40	24.80			
9.63		0.64	57.92			
10.63	7.8	0.80	102.40			
11.63		0.89	155.82			
12.63		0.90	207.60			
13.63	11.1	0.73	255.14			
14.63		0.50	290.20			
15.63		0.29	312.22			
16.63	10.0	0.15	324.50			
17.63		0.01	327.98			
18.63		0.00	328.20			
19.63	5.6	0.00	328.20			
20.63		0.00	328.20			
21.63		0.00	328.20			
22.63	2.8	0.00	328.20			
23.63		0.00	328.20			

% POSSIBLE MINUTES OF SUNSHINE 85

RDU AIRPORT MAXIMUM TEMPERATURE 11.7 CENT

* All the NO_x injected was as NO_2.

** Data suspect but retained.

CHAMBER NUMBER 4
DAY 2 OF 4 11- 6-76

PROPANE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.032	0.000	0.016	0.016								
1.63	0.032	0.000	0.016	0.016								
2.63	0.032	0.000	0.016	0.016								
3.63	0.031	0.000	0.015	0.015								
4.63	0.030	0.000	0.014	0.014								
5.63	0.029	0.000	0.014	0.014								
6.63	0.028	0.000	0.013	0.013								0
7.63	0.028	0.000	0.012	0.012								
8.63	0.031	0.003	0.013	0.016								
9.63	0.037	0.004	0.013	0.017								
10.97	0.058	0.004	0.014	0.018					0.064	0.018		
11.63	0.071	0.002	0.015	0.017							0.019	
12.63	0.086	0.001	0.016	0.017								
13.63	0.097	0.001	0.017	0.018								
14.63	0.105	0.002	0.017	0.019					0.115	0.015	0.072	
15.63	0.106	0.002	0.017	0.019								
16.63	0.103	0.002	0.017	0.019								
17.63	0.097	0.002	0.016	0.018								
18.63	0.091	0.001	0.015	0.016								
19.63	0.089	0.001	0.015	0.016								
20.63	0.087	0.000	0.014	0.014								
21.63	0.083	0.000	0.014	0.014								
22.63	0.082	0.000	0.013	0.013								
23.63	0.079	0.000	0.013	0.013								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	-1.1	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	-1.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	-2.8	0.15	5.70			
8.63		0.40	24.20			
9.63		0.64	57.52			
10.97	8.5	0.81	118.58			
11.63		0.91	154.58			
12.63		0.91	209.18			
13.63	12.2	0.82	260.36			
14.63		0.64	302.72			
15.63		0.40	332.00			
16.63	13.9	0.13	345.74			
17.63		0.00	348.60			
18.63		0.00	348.60			
19.63	7.8	0.00	348.60			
20.63		0.00	348.60			
21.63		0.00	348.60			
22.63	5.6	0.00	348.60			
23.63		0.00	348.60			

% POSSIBLE MINUTES OF SUNSHINE 100

RDU AIRPORT MAXIMUM TEMPERATURE 14.4 CENT

CHAMBER NUMBER 4
DAY 5 OF 4 11- 7-76

PROPANE, NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.078	0.000	0.013	0.013								
1.63	0.077	0.000	0.013	0.013								
2.63	0.075	0.000	0.012	0.012								
3.63	0.073	0.000	0.012	0.012								
4.63	0.072	0.000	0.012	0.012								
5.63	0.071	0.000	0.012	0.012								
6.63	0.070	0.000	0.011	0.011								
7.63	0.070	0.001	0.012	0.013								0
8.63	0.067	0.002	0.012	0.014								
9.63	0.067	0.004	0.012	0.016								
10.97	0.074	0.004	0.014	0.018					0.080	0.006	0.009	
11.63	0.081	0.004	0.015	0.019								
12.63	0.095	0.004	0.016	0.020								230
13.63	0.106	0.004	0.017	0.021								
14.63	0.112	0.003	0.017	0.020								
15.63	0.113	0.003	0.017	0.020					0.113	0.010	0.079	
16.63	0.111	0.003	0.017	0.020								
17.63	0.105	0.002	0.016	0.018								
18.63	0.102	0.003	0.015	0.018								
19.63	0.099	0.003	0.015	0.018								
20.63	0.096	0.003	0.015	0.018								
21.63	0.094	0.004	0.014	0.018								
22.63	0.092	0.004	0.013	0.017								
23.63	0.090	0.004	0.013	0.017								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	2.8	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	1.7	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	0.6	0.00	0.00			
8.63		0.13	4.94			
9.63		0.37	21.86			
10.97	11.1	0.75	73.50			
11.63		0.83	106.54			
12.63		0.84	156.72			
13.63	17.8	0.75	203.70			
14.63		0.59	242.62			
15.63		0.31	267.38			
16.63	18.3	0.08	277.24			
17.63		0.00	279.00			
18.63		0.00	279.00			
19.63	12.8	0.00	279.00			
20.63		0.00	279.00			
21.63		0.00	279.00			
22.63	12.8	0.00	279.00			
23.63		0.00	279.00			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 18.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 4 OF 4 11- 8-76

PROPANE, NO SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 3.0 PPMC/0.05 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.087											
1.63	0.082											
2.63	0.080											
3.63	0.078											
4.63	0.076											
5.63	0.074											
6.63	0.011											
7.63	0.018											
8.63	0.026											
9.63	0.029											
10.63	0.035								0.045	0.044	0.031	
11.63	0.039											
12.63	0.043											
13.63	0.048											
14.63	0.049											
15.63	0.048								0.057	0.039	0.104	
16.63	0.043											
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	6.7	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	3.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	1.1	0.13	4.94			
8.63		0.38	22.24			
9.63		0.62	54.16			
10.63	2.8	0.84	99.72			
11.63		0.66	145.28			
12.63		0.88	191.24			
13.63	4.4	0.72	237.96			
14.63		0.67	279.26			
15.63		0.39	308.82			
16.63	4.4	0.13	322.34			
17.63		0.00	325.20			
18.63		0.00	325.20			
19.63	0.6	0.00	325.20			
20.63		0.00	325.20			
21.63		0.00	325.20			
22.63	-2.2	0.00	325.20			
23.63		0.00	325.20			

% POSSIBLE MINUTES OF SUNSHINE 88

RDU AIRPORT MAXIMUM TEMPERATURE 10.6 CENT

* A second injection took place at 0600 EST, 8 Nov. 76. Target injection 0.05 ppm.

CHAMBER NUMBER 1
DAY 1 OF 4 11-11-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13												
1.13	0.000	0.002	0.000	0.002								
2.13	0.000	0.001	0.000	0.001								
3.13	0.000	0.001	0.000	0.001								
4.13	0.000	0.002	0.000	0.002								
5.13	0.000	0.341	0.203	0.544								
6.13	0.000	0.888	0.214	1.102								
7.13	0.000	0.857	0.240	1.096								
8.13	0.000	0.710	0.374	1.084								
9.13	0.016	0.203	0.802	1.005								
10.13	0.143	0.037	0.822	0.859								
11.13	0.250	0.018	0.714	0.732								
12.13	0.398	0.010	0.588	0.598								
13.13	0.560	0.006	0.454	0.460								
14.13	0.650	0.006	0.360	0.367								
15.13	0.640	0.005	0.320	0.325								
16.13	0.581	0.004	0.305	0.309								
17.13	0.548	0.004	0.287	0.291								
18.13	0.515	0.004	0.276	0.281								
19.13	0.493	0.004	0.268	0.273								
20.13	0.476	0.005	0.267	0.273								
21.13	0.462	0.005	0.266	0.272								
22.13	0.445	0.004	0.260	0.265								
23.13	0.430	0.004	0.255	0.259								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	5.0	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.9	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	1.7	0.13	1.04			
8.13		0.36	10.68			
9.13		0.58	34.04			
10.13	11.1	0.74	70.12			
11.13		0.84	115.32			
12.13		0.83	165.64			
13.13	13.3	0.76	214.88			
14.13		0.59	259.12			
15.13		0.35	292.60			
16.13	16.1	0.11	311.68			
17.13		0.00	317.40			
18.13		0.00	317.40			
19.13	8.3	0.00	317.40			
20.13		0.00	317.40			
21.13		0.00	317.40			
22.13	8.9	0.00	317.40			
23.13		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 2 OF 4 11-12-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.417	0.004	0.252	0.256								
1.13	0.400	0.004	0.244	0.248								
2.13	0.385	0.004	0.238	0.242								
3.13	0.372	0.004	0.234	0.238								
4.13	0.358	0.003	0.228	0.231								
5.13	0.345	0.003	0.224	0.227								
6.13	0.332	0.003	0.217	0.220								
7.13	0.316	0.003	0.213	0.216								
8.13	0.297	0.003	0.203	0.206								
9.13	0.263	0.003	0.198	0.202								
10.13	0.248	0.003	0.195	0.199								
11.13	0.221	0.003	0.188	0.192								
12.13	0.206	0.003	0.185	0.189								
13.13	0.193	0.003	0.180	0.183								
14.13	0.178	0.003	0.178	0.181								
15.13	0.166	0.003	0.176	0.179								
16.13	0.154	0.003	0.167	0.170								
17.13	0.142	0.003	0.164	0.167								
18.13	0.133	0.002	0.158	0.160								
19.13	0.126	0.001	0.154	0.155								
20.13	0.123	0.002	0.152	0.154								
21.13	0.117	0.002	0.152	0.154								
22.13	0.110	0.001	0.149	0.150								
23.13	0.105	0.001	0.147	0.148								

TIME (LST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	7.2	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	3.9	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	2.8	0.00	0.00			
8.13		0.02	0.16			
9.13		0.07	1.76			
10.13	2.2	0.11	6.28			
11.13		0.11	12.88			
12.13		0.15	19.80			
13.13	2.2	0.14	28.72			
14.13		0.16	37.28			
15.13		0.09	46.32			
16.13	2.2	0.01	51.08			
17.13		0.00	51.60			
18.13		0.00	51.60			
19.13	0.0	0.00	51.60			
20.13		0.00	51.60			
21.13		0.00	51.60			
22.13	-1.7	0.00	51.60			
23.13		0.00	51.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 7.8 CENT

CHAMBER NUMBER 1
DAY 3 OF 4 11-13-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.102	0.000	0.145	0.145								
1.13	0.097	0.000	0.148	0.148								
2.13	0.093	0.000	0.144	0.144								
3.13	0.091	0.000	0.147	0.147								
4.13	0.088	0.000	0.145	0.145								
5.13	0.086	0.000	0.144	0.144								
6.13	0.082	0.000	0.141	0.141								
7.13	0.080	0.000	0.140	0.140								
8.13	0.078	0.001	0.139	0.140								
9.13	0.078	0.002	0.138	0.140								
10.13	0.078	0.002	0.132	0.134								
11.13	0.086	0.003	0.131	0.134								
12.13	0.098	0.004	0.127	0.132								
13.13	0.111	0.004	0.124	0.129								
14.13	0.121	0.005	0.120	0.126								
15.13	0.118	0.003	0.117	0.121								
16.13	0.109	0.003	0.113	0.117								
17.13	0.102	0.002	0.111	0.114								
18.13	0.094	0.001	0.108	0.109								
19.13	0.090	0.000	0.105	0.105								390
20.13	0.087	0.000	0.104	0.104								
21.13	0.081	0.001	0.104	0.105								
22.13	0.079	0.001	0.103	0.104								
23.13	0.077	0.000	0.102	0.102								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	-3.3	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	-3.3	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	-4.4	0.16	1.28			
8.13		0.43	13.04			
9.13		0.63	40.44			
10.13	0.6	0.78	79.44			
11.13		0.88	127.04			
12.13		0.88	179.84			
13.13	5.0	0.84	232.32			
14.13		0.61	280.88			
15.13		0.37	315.56			
16.13	5.6	0.09	335.52			
17.13		0.00	340.20			
18.13		0.00	340.20			
19.13	2.2	0.00	340.20			
20.13		0.00	340.20			
21.13		0.00	340.20			
22.13	-2.2	0.00	340.20			
23.13		0.00	340.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 6.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 1
DAY 4 OF 4 11-14-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 10.0 PPMC/1.00 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.13	0.074	0.000	0.102	0.102								
1.13	0.072	0.000	0.101	0.101								
2.13	0.070	0.000	0.101	0.101								
3.13	0.067	0.000	0.101	0.101								
4.13	0.065	0.000	0.101	0.101								
5.13	0.063	0.000	0.100	0.100								
6.13	0.060	0.000	0.099	0.099								
7.13	0.006	0.005	0.148	0.153								
8.13	0.015	0.014	0.141	0.155								
9.13	0.021	0.013	0.139	0.152								
10.13	0.031	0.011	0.135	0.146								
11.13	0.039	0.011	0.132	0.143								
12.13	0.051	0.009	0.127	0.136								
13.13	0.050	0.007	0.125	0.133								
14.13	0.049	0.006	0.119	0.126								
15.13	0.046	0.005	0.116	0.122								
16.13	0.041	0.004	0.114	0.119								
17.13												
18.13												
19.13												
20.13												
21.13												
22.13												
23.13												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.13		0.00	0.00			
1.13	-4.4	0.00	0.00			
2.13		0.00	0.00			
3.13		0.00	0.00			
4.13	-4.4	0.00	0.00			
5.13		0.00	0.00			
6.13		0.00	0.00			
7.13	-6.1	0.07	0.56			
8.13		0.25	6.20			
9.13		0.28	21.44			
10.13	-0.6	0.27	38.16			
11.13		0.30	54.60			
12.13		0.25	72.20			
13.13	2.8	0.14	86.32			
14.13		0.09	94.32			
15.13		0.05	99.40			
16.13	2.8	0.02	102.16			
17.13		0.00	103.20			
18.13		0.00	103.20			
19.13	1.7	0.00	103.20			
20.13		0.00	103.20			
21.13		0.00	103.20			
22.13	1.7	0.00	103.20			
23.13		0.00	103.20			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 3.9 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 1 OF 4 11-11-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30												
1.30	0.000	0.004	0.008	0.012								
2.30	0.000	0.004	0.007	0.011								
3.30	0.000	0.009	0.005	0.013								
4.30	0.000	0.009	0.005	0.013								
5.30	0.000	0.310	0.145	0.455								
6.30	0.000	0.651	0.148	0.799								
7.30	0.000	0.636	0.165	0.801								
8.30	0.000	0.552	0.234	0.786								
9.30	0.005	0.310	0.429	0.739								
10.30	0.047	0.108	0.565	0.673								
11.30	0.106	0.053	0.554	0.608								
12.30	0.181	0.028	0.507	0.535								
13.30	0.259	0.016	0.438	0.454								
14.30	0.326	0.011	0.369	0.380								
15.30	0.352	0.007	0.296	0.303								
16.30	0.314	0.005	0.225	0.230								
17.30	0.274	0.004	0.168	0.172								
18.30	0.246	0.004	0.145	0.149								
19.30	0.233	0.003	0.136	0.139								
20.30	0.222	0.004	0.130	0.135								
21.30	0.216	0.005	0.130	0.136								
22.30	0.206	0.005	0.129	0.135								
23.30	0.196	0.004	0.126	0.131								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	5.0	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	3.9	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	1.7	0.13	2.54			
8.30		0.36	14.28			
9.30		0.58	39.84			
10.30	11.1	0.74	77.52			
11.30		0.84	125.72			
12.30		0.83	173.94			
13.30	13.3	0.76	222.48			
14.30		0.59	265.02			
15.30		0.35	296.10			
16.30	16.1	0.11	312.78			
17.30		0.00	317.40			
18.30		0.00	317.40			
19.30	8.3	0.00	317.40			
20.30		0.00	317.40			
21.30		0.00	317.40			
22.30	8.9	0.00	317.40			
23.30		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 2 OF 4 11-12-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.186	0.004	0.126	0.131								
1.30	0.180	0.004	0.124	0.129								
2.30	0.171	0.004	0.117	0.122								
3.30	0.163	0.003	0.116	0.120								
4.30	0.155	0.003	0.112	0.116								
5.30	0.144	0.003	0.111	0.114								
6.30	0.138	0.003	0.108	0.111								
7.30	0.128	0.002	0.107	0.109								
8.30	0.119	0.002	0.106	0.108								
9.30	0.107	0.003	0.105	0.108								
10.30	0.099	0.003	0.104	0.107								
11.30	0.090	0.003	0.103	0.106								
12.30	0.082	0.003	0.102	0.105								
13.30	0.078	0.003	0.102	0.105								
14.30	0.072	0.003	0.102	0.105								
15.30	0.068	0.003	0.101	0.104								
16.30	0.063	0.003	0.100	0.103								
17.30	0.058	0.003	0.098	0.101								
18.30	0.053	0.002	0.095	0.097								
19.30	0.050	0.001	0.093	0.094								
20.30	0.049	0.001	0.093	0.094								
21.30	0.046	0.001	0.093	0.094								
22.30	0.043	0.000	0.092	0.092								
23.30	0.041	0.000	0.091	0.091								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	7.2	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	3.9	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	2.8	0.00	0.00			
8.30		0.02	0.36			
9.30		0.07	2.46			
10.30	2.2	0.11	7.38			
11.30		0.11	14.98			
12.30		0.15	21.30			
13.30	2.2	0.14	30.12			
14.30		0.16	38.88			
15.30		0.09	47.22			
16.30	2.2	0.01	51.18			
17.30		0.00	51.60			
18.30		0.00	51.60			
19.30	0.0	0.00	51.60			
20.30		0.00	51.60			
21.30		0.00	51.60			
22.30	-1.7	0.00	51.60			
23.30		0.00	51.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 7.8 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

CHAMBER NUMBER 2
DAY 3 OF 4 11-13-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.039	0.000	0.091	0.091								
1.30	0.037	0.000	0.091	0.091								
2.30	0.035	0.000	0.090	0.090								
3.30	0.034	0.000	0.090	0.090								
4.30	0.032	0.000	0.090	0.090								
5.30	0.031	0.000	0.089	0.089								
6.30	0.030	0.000	0.090	0.090								
7.30	0.029	0.000	0.090	0.090								
8.30	0.031	0.001	0.089	0.090								
9.30	0.040	0.002	0.089	0.091								
10.30	0.047	0.002	0.089	0.091								
11.30	0.060	0.003	0.087	0.090								
12.30	0.076	0.004	0.087	0.091								
13.30	0.090	0.004	0.087	0.091								
14.30	0.099	0.004	0.086	0.090								
15.30	0.099	0.003	0.085	0.088								
16.30	0.091	0.003	0.081	0.084								
17.30	0.086	0.002	0.081	0.083								
18.30	0.079	0.000	0.079	0.079								760
19.30	0.076	0.000	0.078	0.078								
20.30	0.074	0.000	0.077	0.077								
21.30	0.070	0.000	0.076	0.076								
22.30	0.068	0.000	0.076	0.076								
23.30	0.067	0.000	0.075	0.075								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-3.3	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-3.3	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	-4.4	0.16	2.88			
8.30		0.43	17.34			
9.30		0.63	46.74			
10.30	0.6	0.78	87.24			
11.30		0.88	135.84			
12.30		0.88	188.64			
13.30	5.0	0.84	240.72			
14.30		0.61	286.98			
15.30		0.37	319.26			
16.30	5.6	0.09	336.42			
17.30		0.00	340.20			
18.30		0.00	340.20			
19.30	2.2	0.00	340.20			
20.30		0.00	340.20			
21.30		0.00	340.20			
22.30	-2.2	0.00	340.20			
23.30		0.00	340.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 6.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 2
DAY 4 OF 4 11-14-76

MIX WITH NO SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.71 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NOKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.30	0.064	0.000	0.076	0.076								
1.30	0.063	0.000	0.076	0.076								
2.30	0.062	0.000	0.075	0.075								
3.30	0.060	0.000	0.075	0.075								
4.30	0.059	0.000	0.075	0.075								
5.30	0.057	0.000	0.075	0.075								
6.30	0.056	0.000	0.075	0.075								
7.30	0.005	0.009	0.119	0.128								
8.30	0.015	0.016	0.114	0.130								
9.30	0.020	0.014	0.115	0.129								
10.30	0.031	0.012	0.113	0.125								
11.30	0.040	0.011	0.111	0.121								
12.30	0.049	0.009	0.108	0.116								
13.30	0.049	0.006	0.107	0.113								
14.30	0.048	0.006	0.103	0.109								
15.30	0.045	0.005	0.102	0.107								
16.30	0.040	0.004	0.100	0.104								
17.30												
18.30												
19.30												
20.30												
21.30												
22.30												
23.30												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.30		0.00	0.00			
1.30	-4.4	0.00	0.00			
2.30		0.00	0.00			
3.30		0.00	0.00			
4.30	-4.4	0.00	0.00			
5.30		0.00	0.00			
6.30		0.00	0.00			
7.30	-6.1	0.07	1.26			
8.30		0.25	8.70			
9.30		0.28	24.24			
10.30	-0.6	0.27	40.86			
11.30		0.30	57.60			
12.30		0.25	74.70			
13.30	2.8	0.14	87.72			
14.30		0.09	95.22			
15.30		0.05	99.90			
16.30	2.8	0.02	102.36			
17.30		0.00	103.20			
18.30		0.00	103.20			
19.30	1.7	0.00	103.20			
20.30		0.00	103.20			
21.30		0.00	103.20			
22.30	1.7	0.00	103.20			
23.30		0.00	103.20			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 3.9 CENT

*A second reactant injection took place at 0700 EST, 14 November 1976. The target injection was 0.05 ppm NO.

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO. 68-02-2237

CHAMBER NUMBER 3
DAY 1 OF 4 11-11-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.02 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47												
1.47	0.000	0.007	0.001	0.008								
2.47	0.000	0.006	0.001	0.007								
3.47	0.000	0.007	0.001	0.008								
4.47	0.000	0.004	0.035	0.039								
5.47	0.000	0.233	0.031	0.264								
6.47	0.000	0.230	0.031	0.261								
7.47	0.000	0.220	0.041	0.262								
8.47	0.009	0.084	0.161	0.245								
9.47	0.219	0.005	0.171	0.176								
10.47	0.334	0.004	0.131	0.135								
11.47	0.338	0.004	0.123	0.128								
12.47	0.329	0.004	0.117	0.122								
13.47	0.319	0.004	0.113	0.118								
14.47	0.312	0.005	0.108	0.113								
15.47	0.297	0.005	0.105	0.110								
16.47	0.272	0.004	0.100	0.104								
17.47	0.253	0.004	0.094	0.098								
18.47	0.238	0.003	0.087	0.090								
19.47	0.228	0.003	0.086	0.089								
20.47	0.220	0.003	0.086	0.089								
21.47	0.213	0.003	0.086	0.089								
22.47	0.207	0.003	0.086	0.089								
23.47	0.198	0.003	0.085	0.088								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	5.0	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	3.9	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	1.7	0.13	5.64			
8.47		0.36	17.88			
9.47		0.58	45.64			
10.47	11.1	0.74	84.92			
11.47		0.84	132.12			
12.47		0.83	182.24			
13.47	13.3	0.76	230.08			
14.47		0.59	270.92			
15.47		0.35	299.60			
16.47	16.1	0.11	313.88			
17.47		0.00	317.40			
18.47		0.00	317.40			
19.47	8.3	0.00	317.40			
20.47		0.00	317.40			
21.47		0.00	317.40			
22.47	8.9	0.00	317.40			
23.47		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 16.1 CENT

CHAMBER NUMBER 3
DAY 2 OF 4 11-12-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.02 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPK)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.193	0.003	0.081	0.084								
1.47	0.185	0.003	0.080	0.083								
2.47	0.175	0.003	0.075	0.078								
3.47	0.168	0.003	0.075	0.078								
4.47	0.157	0.003	0.073	0.076								
5.47	0.148	0.003	0.068	0.071								
6.47	0.140	0.002	0.065	0.067								
7.47	0.129	0.002	0.064	0.066								
8.47	0.119	0.002	0.063	0.065								
9.47	0.105	0.003	0.061	0.064								
10.47	0.096	0.003	0.060	0.063								
11.47	0.086	0.003	0.059	0.062								
12.47	0.079	0.003	0.056	0.059								
13.47	0.075	0.003	0.056	0.059								
14.47	0.068	0.003	0.056	0.059								
15.47	0.064	0.003	0.054	0.057								
16.47	0.059	0.003	0.052	0.055								
17.47	0.055	0.003	0.051	0.055								
18.47	0.050	0.002	0.049	0.051								
19.47	0.048	0.001	0.048	0.049								
20.47	0.047	0.001	0.048	0.049								
21.47	0.043	0.001	0.048	0.049								
22.47	0.040	0.000	0.050	0.050								
23.47	0.037	0.000	0.049	0.049								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	7.2	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	5.9	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	2.8	0.00	0.00			
8.47		0.02	0.56			
9.47		0.07	3.16			
10.47	2.2	0.11	8.48			
11.47		0.11	15.08			
12.47		0.15	22.80			
13.47	2.2	0.14	31.52			
14.47		0.16	40.48			
15.47		0.09	48.12			
16.47	2.2	0.01	51.28			
17.47		0.00	51.60			
18.47		0.00	51.60			
19.47	0.0	0.00	51.60			
20.47		0.00	51.60			
21.47		0.00	51.60			
22.47	-1.7	0.00	51.60			
23.47		0.00	51.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 7.8 CENT

CHAMBER NUMBER 3
DAY 3 OF 4 11-13-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.02 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.035	0.000	0.049	0.049								
1.47	0.032	0.000	0.050	0.050								
2.47	0.029	0.000	0.050	0.050								
3.47	0.028	0.000	0.050	0.050								
4.47	0.026	0.000	0.050	0.050								
5.47	0.025	0.000	0.049	0.049								
6.47	0.024	0.000	0.050	0.050								
7.47	0.022	0.001	0.049	0.050								
8.47	0.027	0.002	0.049	0.051								
9.47	0.043	0.002	0.047	0.049								
10.47	0.051	0.002	0.046	0.049								
11.47	0.059	0.003	0.046	0.050								
12.47	0.070	0.003	0.046	0.050								
13.47	0.079	0.003	0.045	0.049								
14.47	0.082	0.003	0.042	0.046								
15.47	0.081	0.003	0.041	0.045								
16.47	0.075	0.002	0.039	0.042								
17.47	0.071	0.001	0.039	0.041								
18.47	0.066	0.000	0.037	0.037								1100
19.47	0.063	0.000	0.037	0.037								
20.47	0.061	0.000	0.037	0.037								
21.47	0.058	0.000	0.037	0.037								
22.47	0.056	0.000	0.038	0.038								
23.47	0.053	0.000	0.037	0.037								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-3.3	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-3.3	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	-4.4	0.16	4.48			
8.47		0.43	21.04			
9.47		0.63	53.04			
10.47	0.6	0.78	95.04			
11.47		0.88	144.64			
12.47		0.88	197.44			
13.47	5.0	0.84	249.12			
14.47		0.61	293.08			
15.47		0.37	322.96			
16.47	5.6	0.09	337.32			
17.47		0.00	340.20			
18.47		0.00	340.20			
19.47	2.2	0.00	340.20			
20.47		0.00	340.20			
21.47		0.00	340.20			
22.47	-2.2	0.00	340.20			
23.47		0.00	340.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 6.1 CENT

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 5
DAY 4 OF 4 11-14-76

MIX WITH NO SLUG * 0% DILUTION
TARGET INITIAL HC/NOX: 5.0 PPMC/0.02 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBK1 (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.47	0.050	0.000	0.038	0.038								
1.47	0.049	0.000	0.037	0.037								
2.47	0.048	0.000	0.037	0.037								
3.47	0.047	0.000	0.038	0.038								
4.47	0.045	0.000	0.038	0.038								
5.47	0.043	0.000	0.038	0.038								
6.47	0.001	0.018	0.075	0.093								
7.47	0.003	0.020	0.074	0.094								
8.47	0.010	0.026	0.069	0.095								
9.47	0.014	0.019	0.075	0.094								
10.47	0.022	0.015	0.073	0.088								
11.47	0.032	0.013	0.073	0.086								
12.47	0.039	0.010	0.072	0.082								
13.47	0.039	0.009	0.069	0.078								
14.47	0.037	0.006	0.067	0.074								
15.47	0.035	0.005	0.065	0.070								
16.47	0.030	0.004	0.062	0.066								
17.47												
18.47												
19.47												
20.47												
21.47												
22.47												
23.47												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.47		0.00	0.00			
1.47	-4.4	0.00	0.00			
2.47		0.00	0.00			
3.47		0.00	0.00			
4.47	-4.4	0.00	0.00			
5.47		0.00	0.00			
6.47		0.00	0.00			
7.47	-6.1	0.07	1.96			
8.47		0.25	11.20			
9.47		0.28	27.04			
10.47	-0.6	0.27	43.56			
11.47		0.30	60.60			
12.47		0.25	77.20			
13.47	2.8	0.14	89.12			
14.47		0.09	96.12			
15.47		0.05	100.40			
16.47	2.8	0.02	102.56			
17.47		0.00	103.20			
18.47		0.00	103.20			
19.47	1.7	0.00	103.20			
20.47		0.00	103.20			
21.47		0.00	103.20			
22.47	1.7	0.00	103.20			
23.47		0.00	103.20			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 3.9 CENT

*A second reactant injection took place at 0700 EST, 14 November 1976. The target injection was 0.050 ppm NO.

CHAMBER NUMBER 4
DAY 1 OF 4 11-11-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63												
1.63	0.000	0.005	0.001	0.006								
2.63	0.000	0.005	0.001	0.006								
3.63	0.000	0.004	0.001	0.005								
4.63	0.000	0.001	0.022	0.023								
5.63	0.000	0.096	0.021	0.117								
6.63	0.000	0.096	0.021	0.117								
7.63	0.000	0.095	0.022	0.117								
8.63	0.002	0.075	0.042	0.117								
9.63	0.028	0.031	0.079	0.110								
10.63	0.076	0.014	0.085	0.099								
11.63	0.124	0.011	0.075	0.086								
12.63	0.173	0.009	0.064	0.073								
13.63	0.212	0.006	0.054	0.061								
14.63	0.228	0.005	0.052	0.058								
15.63	0.221	0.005	0.049	0.055								
16.63	0.205	0.005	0.046	0.052								
17.63	0.187	0.004	0.042	0.047								
18.63	0.181	0.003	0.040	0.044								
19.63	0.172	0.003	0.039	0.043								
20.63	0.169	0.003	0.038	0.042								
21.63	0.163	0.004	0.037	0.042								
22.63	0.153	0.004	0.036	0.040								
23.63	0.148	0.003	0.035	0.038								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	5.0	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	3.9	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	1.7	0.13	4.94			
8.63		0.36	21.48			
9.63		0.58	51.44			
10.63	11.1	0.74	92.32			
11.63		0.84	140.52			
12.63		0.83	190.54			
13.63	13.3	0.76	237.68			
14.63		0.59	276.82			
15.63		0.35	303.10			
16.63	16.1	0.11	314.98			
17.63		0.00	317.40			
18.63		0.00	317.40			
19.63	8.5	0.00	317.40			
20.63		0.00	317.40			
21.63		0.00	317.40			
22.63	8.9	0.00	317.40			
23.63		0.00	317.40			

% POSSIBLE MINUTES OF SUNSHINE 96

RDU AIRPORT MAXIMUM TEMPERATURE 61.0 CENTI

RTI OUTDOOR SMOG CHAMBER STUDY

USEPA CONTRACT NO.68-02-2207

CHAMBER NUMBER 4
DAY 2 OF 4 11-12-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.140	0.003	0.034	0.037								
1.63	0.135	0.003	0.033	0.036								
2.63	0.128	0.003	0.033	0.036								
3.63	0.121	0.003	0.033	0.036								
4.63	0.116	0.003	0.033	0.036								
5.63	0.111	0.002	0.031	0.033								
6.63	0.105	0.002	0.030	0.032								
7.63	[illegible]	0.002	0.030	0.032								
8.63	0.092	0.002	0.029	0.031								
9.63	0.083	0.003	0.029	0.032								
10.63	0.078	0.003	0.029	0.032								
11.63	0.071	0.003	0.029	0.032								
12.63	0.066	0.003	0.029	0.032								
13.63	0.061	0.003	0.029	0.032								
14.63	0.057	0.003	0.029	0.032								
15.63	0.053	0.003	0.028	0.031								
16.63	0.050	0.003	0.028	0.031								
17.63	0.046	0.002	0.028	0.030								
18.63	0.043	0.002	0.027	0.029								
19.63	0.041	0.001	0.026	0.027								
20.63	0.040	0.001	0.026	0.027								
21.63	0.037	0.001	0.027	0.028								
22.63	0.034	0.000	0.028	0.028								
23.63	0.032	0.000	0.028	0.028								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	7.2	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	5.9	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	2.8	0.00	0.00			
8.63		0.02	0.76			
9.63		0.07	3.86			
10.63	2.2	0.11	9.58			
11.63		0.11	16.18			
12.63		0.15	24.50			
13.63	2.2	0.14	32.92			
14.63		0.16	42.08			
15.63		0.09	49.0			
16.63	2.2	0.01	51.38			
17.63		0.00	51.60			
18.63		0.00	51.60			
19.63	0.0	0.00	51.60			
20.63		0.00	51.60			
21.63		0.00	51.60			
22.63	-1.7	0.00	51.60			
23.63		0.00	51.60			

% POSSIBLE MINUTES OF SUNSHINE 0

RDU AIRPORT MAXIMUM TEMPERATURE 46.0 CENT

CHAMBER NUMBER 4
DAY 3 OF 4 11-13-76

MIX WITH NO SLUG 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.029	0.000	0.028	0.028								
1.63	0.028	0.000	0.029	0.029								
2.63	0.026	0.000	0.029	0.029								
3.63	0.025	0.000	0.029	0.029								
4.63	0.024	0.000	0.030	0.030								
5.63	0.021	0.000	0.029	0.029								
6.63	0.021	0.000	0.029	0.029								
7.63	0.021	0.001	0.028	0.029								
8.63	0.025	0.003	0.028	0.031								
9.63	0.037	0.003	0.028	0.031								
10.63	0.050	0.003	0.026	0.029								
11.63	0.063	0.004	0.027	0.031								
12.63	0.073	0.004	0.027	0.031								
13.63	0.079	0.004	0.027	0.031								
14.63	0.080	0.003	0.027	0.030								
15.63	0.078	0.003	0.026	0.029								
16.63	0.072	0.003	0.026	0.029								
17.63	0.068	0.001	0.025	0.026								760
18.63	0.064	0.000	0.025	0.025								
19.63	0.062	0.000	0.025	0.025								
20.63	0.060	0.000	0.025	0.025								
21.63	0.058	0.000	0.026	0.026								
22.63	0.057	0.000	0.026	0.026								
23.63	0.055	0.000	0.026	0.026								

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	-3.3	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	-3.3	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	-4.4	0.16	6.08			
8.63		0.43	25.94			
9.63		0.63	59.34			
10.63	0.6	0.78	102.84			
11.63		0.88	153.44			
12.63		0.88	206.24			
13.63	5.0	0.84	257.52			
14.63		0.61	299.18			
15.63		0.37	326.66			
16.63	5.6	0.09	338.22			
17.63		0.00	340.20			
18.63		0.00	340.20			
19.63	2.2	0.00	340.20			
20.63		0.00	340.20			
21.63		0.00	340.20			
22.63	-2.2	0.00	340.20			
23.63		0.00	340.20			

% POSSIBLE MINUTES OF SUNSHINE 86

RDU AIRPORT MAXIMUM TEMPERATURE 43.0 CENT

CHAMBER NUMBER 4
DAY 4 OF 4 11-14-76

MIX WITH NO SLUG* 0% DILUTION
TARGET INITIAL HC/NOX: 1.0 PPMC/0.10 PPM

TIME (EST)	O3 (PPM)	NO (PPM)	NO2 (PPM)	NOX (PPM)	THC (PPM)	CH4 (PPM)	NMHC (PPM)	CO (PPM)	NBKI (PPM)	NO2-S (PPM)	HCHO (PPM)	CN (/CM3)
0.63	0.052	0.000	0.026	0.026								
1.63	0.051	0.000	0.026	0.026								
2.63	0.050	0.000	0.026	0.026								
3.63	0.048	0.000	0.026	0.026								
4.63	0.047	0.000	0.026	0.026								
5.63	0.046	0.000	0.026	0.026								
6.63	0.000	0.016	0.064	0.080								
7.63	0.004	0.020	0.062	0.082								
8.63	0.007	0.025	0.058	0.083								
9.63	0.011	0.025	0.058	0.083								
10.63	0.012	0.022	0.058	0.081								
11.63	0.016	0.022	0.055	0.078								
12.63	0.015	0.017	0.060	0.077								
13.63	0.015	0.017	0.059	0.076								
14.63	0.013	0.014	0.060	0.074								
15.63	0.011	0.011	0.060	0.071								
16.63	0.005	0.007	0.062	0.070								
17.63												
18.63												
19.63												
20.63												
21.63												
22.63												
23.63												

TIME (EST)	TEMP (CENT)	SR (LANG/MIN)	CUM-SR (LANG)	DILUTION (LPM)	BEGAN (EST)	ENDED (EST)
0.63		0.00	0.00			
1.63	-4.4	0.00	0.00			
2.63		0.00	0.00			
3.63		0.00	0.00			
4.63	-4.4	0.00	0.00			
5.63		0.00	0.00			
6.63		0.00	0.00			
7.63	-6.1	0.07	2.66			
8.63		0.25	13.70			
9.63		0.28	29.84			
10.63	-0.6	0.27	46.26			
11.63		0.30	63.60			
12.63		0.25	79.70			
13.63	2.8	0.14	90.52			
14.63		0.09	97.02			
15.63		0.05	100.90			
16.63	2.8	0.02	102.76			
17.63		0.00	103.20			
18.63		0.00	103.20			
19.63	1.7	0.00	103.20			
20.63		0.00	103.20			
21.63		0.00	103.20			
22.63	1.7	0.00	103.20			
23.63		0.00	103.20			

% POSSIBLE MINUTES OF SUNSHINE 6

RDU AIRPORT MAXIMUM TEMPERATURE 39.0 CENT

*A second reactant injection took place at 0700 EST, 14 November 1976. The target injection was 0.050 ppm NO.